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### MEMORANDUM

SOME EFFECTS OF HORIZONTAL-TAIL POSITION ON

THE VERTICAL-TAIL PRESSURE DISTRIBUTIONS OF A COMPLETE

MODEL IN SIDESLIP AT HIGH SUBSONIC SPEEDS

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#### SUMMARY

An investigation has been made in the Langley high-speed 7- by 10-foot tunnel of some effects of horizontal-tail position on the vertical-tail pressure distributions of a complete model in sideslip at high subsonic speeds. The wing of the model was swept back  $28.82^{\circ}$  at the quarter-chord line and had an aspect ratio of 3.50, a taper ratio of 0.067, and NACA 65A004 airfoil sections parallel to the model plane of symmetry. Tests were made with the horizontal tail off, on the wing-chord plane extended, and in T-tail arrangements in forward and rearward locations. The test Mach numbers ranged from 0.60 to 0.92, which corresponds to a Reynolds number range from approximately 2.93 x  $10^6$  to  $3.69 \times 10^6$ , based on the wing mean aerodynamic chord. The sideslip angles varied from -3.90 to  $12.7^{\circ}$  at several selected angles of attack.

The results indicated that, for a given angle of sideslip, increases in angle of attack caused reductions in the vertical-tail loads in the vicinity of the root chord and increases at the midspan and tip locations, with rearward movements in the local chordwise centers of pressure for the midspan locations and forward movements near the tip of the vertical tail. At the higher angles of attack all configurations investigated experienced outboard and rearward shifts in the center of pressure of the total vertical-tail load. Location of the horizontal tail on the wingchord plane extended produced only small effects on the vertical-tail loads and centers of pressure. Locating the horizontal tail at the tip of the vertical tail in the forward position caused increases in the vertical-tail loads; this configuration, however, experienced considerable reduction in loads with increasing Mach number. Location of the horizontal tail at the tip of the vertical tail in the rearward position produced the largest increases in vertical-tail loads per degree sideslip angle; this configuration experienced the smallest variations of loads with Mach number of any of the configurations investigated.

#### INTRODUCTION

The need for a better understanding of the nature of the air flow at the tail and its effects on the resulting vertical-tail loads has become increasingly important because several high-speed airplanes in current use have, in maneuvering flight, been subjected to extreme vertical-tail loads and experienced losses in directional stability. Of the many variables affecting the aerodynamic characteristics of a particular vertical-tail configuration, wing position and fuselage cross-sectional shape have been studied and the results of these investigations have been presented in references 1 to 5. A recent experimental investigation (ref. 6) has shown that the directional stability of a complete airplane model is also affected appreciably by the location of the horizontal tail.

The purpose of this paper is to present the results of an experimental investigation made to determine the effects of horizontal-tail position on the chordwise pressure distributions and integrated loads on the vertical tail of a complete model in sideslip at high subsonic speeds. The complete model consisted of a highly tapered wing (taper ratio, 0.067) of aspect ratio 3.50 with a quarter-chord sweepback of 28.82°, located on the center line of a fuselage which had an ogival nose, a cylindrical center section, and a truncated tail cone. The vertical-tail aspect ratio was 1.02 and the quarter-chord sweepback angle was 28.35°. The triangular horizontal tail was of aspect ratio 4.00 and was located either on the wing-chord plane or at the tip of the vertical tail in T-tail arrangements. Two chordwise locations were investigated for the T-tail configurations: one with the horizontal tail forward (zero trailing-edge overhang) and one with the horizontal tail rearward (zero leading-edge overhang). The sideslip-angle range extended from -3.9° to 12.7° at angles of attack of approximately -9°, 0°, 9°, and 15°. The test Mach numbers varied from 0.60 to 0.92 with the corresponding Reynolds number (based on wing mean aerodynamic chord) varying from  $2.93 \times 10^{6}$ to  $3.69 \times 10^6$ .

#### SYMBOLS

$$C_{
m L}$$
 lift coefficient,  ${{
m Lift}\over {
m qS}}$ 

$$C_p$$
 pressure coefficient,  $\frac{p_l - p_{\infty}}{q}$ 

p, local static pressure, lb/sq ft

 $p_{\infty}$  free-stream static pressure, lb/sq ft

q dynamic pressure,  $\frac{1}{2}$ o $V_{\infty}^2$ , lb/sq ft

ρ air density, slugs/cu ft

V free-stream velocity, ft/sec

M Mach number

c<sub>v</sub> local vertical-tail chord, ft

 $\bar{c}_v$  vertical-tail mean aerodynamic chord, ft

c v.av average vertical-tail chord, ft

ē wing mean aerodynamic chord, ft

b<sub>v</sub> exposed vertical-tail span, ft

x chordwise distance from leading edge of vertical-tail local chord, ft

z spanwise distance from vertical-tail root chord (vertical-tail root chord 0.154 ft above fuselage center line), ft

spanwise distance from vertical-tail root chord to vertical-tail mean aerodynamic chord, ft

increment of vertical-tail local chord over which the pressure at a particular orifice is assumed to act (distance between points midway between adjacent orifices)

c<sub>n.v</sub> vertical-tail section normal-force coefficient,

$$\sum_{\frac{\mathbf{x}}{\mathbf{c}_{\mathbf{v}}}=0}^{\mathbf{l}} \left( \mathbf{c}_{\mathbf{p},\mathbf{L}} - \mathbf{c}_{\mathbf{p},\mathbf{R}} \right) \triangle \left( \frac{\mathbf{x}}{\mathbf{c}_{\mathbf{v}}} \right)$$

c<sub>m,v</sub> vertical-tail section pitching-moment coefficient about 0.25 local vertical-tail chord,

$$\sum_{\frac{\mathbf{x}}{\mathbf{c}_{\mathbf{v}}} = 0}^{1} \left( C_{\mathbf{p}, L} - C_{\mathbf{p}, R} \right) \left( \frac{\mathbf{x}}{\mathbf{c}_{\mathbf{v}}} - 0.25 \right) \Delta \left( \frac{\mathbf{x}}{\mathbf{c}_{\mathbf{v}}} \right)$$

local chordwise location of vertical-tail center of pressure,  $-\left(\frac{c_{m,\,v}}{c_{n,\,v}}-0.25\right)$ 

 $\frac{\bar{x}}{\bar{c}}$  chordwise center-of-pressure location of total vertical-tail load,

$$0.25 - \frac{\int_{0}^{1.0} \frac{\Delta c_{n} c_{v}}{\Delta \beta c_{v,av}} \left[ \left( \frac{z'}{b_{v}} - \frac{z}{b_{v}} \right) \frac{b_{v}}{\bar{c}_{v}} \tan \Lambda + \left( 0.25 - \frac{\bar{x}}{c_{v}} \right) \frac{c_{v}}{\bar{c}_{v}} \right] d \left( \frac{z}{b_{v}} \right)}{\int_{0}^{1.0} \frac{\Delta c_{n'} c_{v}}{\Delta \beta c_{v,av}} d \left( \frac{z}{b_{v}} \right)}$$

 $\frac{\overline{z}}{b_y}$  spanwise center-of-pressure location of total vertical-tail load,

$$\frac{\int_{0}^{1.0} \frac{\Delta c_{n} c_{v}}{\Delta \beta c_{v,av}} \frac{z}{b_{v}} d\left(\frac{z}{b_{v}}\right)}{\int_{0}^{1.0} \frac{\Delta c_{n} c_{v}}{\Delta \beta c_{v,av}} d\left(\frac{z}{b_{v}}\right)}$$

α angle of attack, deg

 $\beta$  angle of sideslip, deg

it horizontal-tail incidence angle, deg

Λ sweep angle of quarter-chord line, deg

Subscripts:

R right side of vertical tail looking upstream

L left side of vertical tail looking upstream

#### MODELS AND APPARATUS

Details of the complete model as tested are presented in figure 1 and a photograph of a typical model mounted on the sting-support system is presented as figure 2. The fuselage had a fineness ratio of 10.94 and was constructed of aluminum. The physical characteristics of the fuselage including afterbody ordinates are given in figure 1(d). The aluminum wing was swept back 28.820 at the quarter-chord line (wing 80-percent-chord line was unswept) and had an aspect ratio of 3.50, a taper ratio of 0.067, and NACA 65A004 airfoil sections parallel to the fuselage center line. The triangular horizontal tail was made of steel and covered with plastic and fiber glass; it had an aspect ratio of 4.00 and NACA 65A006 airfoil sections parallel to the fuselage center line. The horizontal tail was tested in three locations: on the wing chord line, and atop the vertical tail in both forward and rearward locations. These locations are shown in figure 1(b). The vertical tail was made of steel and was covered with plastic and fiber glass; it had an aspect ratio of 1.02 (based on exposed area and span), a taper ratio of 0.46, quarter-chord sweep of 28.35°, and NACA 65A006 airfoil sections. Chordwise pressure orifices (in rows parallel to the fuselage center line) were located at four spanwise stations. Details of the orifice locations are given in figure 1(c) and other details of model geometry are given in table I. The model of this investigation is identical to the model of reference 6.

Tests were made on the sting-support system shown in figure 2. With this system the model can be remotely operated through an angle-of-attack range of approximately  $26^{\circ}$  in the plane of the vertical strut. By utilization of couplings in the sting behind the model, the model can be rolled  $90^{\circ}$  so that either angle of attack or angle of sideslip can be the remotely controlled variable. With the wings vertical, the couplings can be used to support the model at fixed angles of attack while the model is tested through the angle-of-sideslip range.

With the models at a given angle of attack and angle of sideslip, a record was taken of the pressures existing at the orifices by photographing a manometer board to which the orifices were connected. These pressures were reduced to coefficient form and are presented in tables II to VIII.

#### TESTS AND CORRECTIONS

The tests were made in the Langley high-speed 7- by 10-foot tunnel through a Mach number range from 0.60 to 0.92, which corresponds to a Reynolds number range of approximately  $2.93\times10^6$  to  $3.69\times10^6$  based

on the wing mean aerodynamic chord. Pressure measurements on the vertical tail were made through a sideslip-angle range from -3.9° to 12.7° at angles of attack of approximately -9°, 0°, 9°, and 15° with the horizontal tail on the fuselage center line and at the tip of the vertical tail in T-tail arrangements. Two chordwise locations were investigated for the T-tail configurations: one with the horizontal tail forward (zero trailing-edge overhang) and one with the horizontal tail rearward (zero leading-edge overhang). (See fig. 1(b).) Pressure measurements were also made for configurations for which the wing, the horizontal tail, or both, were removed. The effects of changing the horizontal-tail incidence angle from 0° to -6° were investigated for the T-tail configuration in the forward position.

Blockage corrections calculated by the method of reference 7 were applied to Mach number and dynamic pressure. Jet-boundary corrections calculated by the method of reference 8 have been applied to the angle of attack. Corrections for sting-support deflection have been applied to the angles of attack and sideslip.

#### PRESENTATION OF RESULTS

All the individual pressure coefficients are presented in tables II to VIII and some selected results from the investigation are presented in the following figures:

|  | Figure  |
|--|---------|
| Variation of model lift coefficient with angle of attack for   | _       |
| horizontal tail off  | 3       |
| Effect of horizontal-tail position on vertical-tail pressure   |         |
| distribution   | 4 and 5 |
| Effect of sideslip angle on the spanwise variation of          |         |
| vertical-tail section normal-force coefficient                 | 6       |
| Effect of horizontal-tail position on the spanwise variation   |         |
| of vertical-tail section normal-force coefficient per          |         |
| degree of sideslip   | 7 and 8 |
| Effect of horizontal-tail position and incider.ce on the span- |         |
| wise variation of vertical-tail section normal-force coeffi-   |         |
| cient per degree of sideslip                                   | 9       |
| Effect of horizontal-tail position and incidence on the        |         |
| chordwise location of vertical-tail local c∈nters of           |         |
| pressure   | 10      |
| Effect of horizontal-tail position and incidence on the        |         |
| variation of the center of pressure of the total vertical-     |         |
| tail load with angle of attack                                 | 11      |
|  |         |

#### **DISCUSSION**

#### Vertical-Tail Loads

For a given angle of attack, increasing the angle of sideslip caused increases in the vertical-tail section loads for all configurations investigated, except at the highest sideslip angle  $(12.7^{\circ})$  where in some cases load reductions occurred near the tip of the vertical tail (fig. 6).

For all configurations investigated (figs. 7 to 9) the effects of increasing the angle of attack for small angles of sideslip was to cause decreases in the vertical-tail loads in the vicinity of the root chord and to cause increases near the midspan locations. The loss in vertical-tail loads near the root and gain in the midspan region can be attributed to the large flow angularities generated by the fuselage vortices which become stronger and asymmetrically located with respect to the tail plane as the angle of attack is increased (refs. 2 and 9). The addition of the wing on the fuselage center line produced no significant effects on the vertical-tail loads except at the highest angle of attack (approx. 15°, figs. 7 and 8) where the wing causes an outboard shift of the spanwise center of load. This shift in load is presumed to be due to the wing downwash causing the body separation vortices to cross the vertical tail at a lower level. This effect has also been noted in reference 2.

The addition of the horizontal tail on the wing-chord plane extended (figs. 6 to 8) produced only small increases in the vertical-tail loads because of its small end-plate effect. Locating the horizontal tail at the tip of the vertical tail in the forward position (zero trailing-edge overhang, figs. 6 to 9) caused large increases in the vertical-tail loads. particularly near the tip of the vertical tail when compared with those for the horizontal-tail-off configuration or the configuration having the horizontal tail on the wing-chord plane extended. These increases in vertical-tail loads can be attributed to the more complete end-plate effectiveness of the horizontal tail on the vertical tail than to that of the horizontal-tail configuration located on the wing-chord plane extended. Moving the horizontal tail rearward on the vertical tail (zero leading-edge overhang, figs. 6 and 9) produced the largest vertical-tail loads of any of the configurations investigated; this indicated that the horizontal-tail configuration located rearward on the tip of the vertical tail produced a more favorable interference flow field. These results correlate well with the directional stability characteristics presented for the same configurations in reference 6. It should also be pointed out that the effects of the locations of the tip-mounted horizontal-tail configurations on the directional stability (ref. 6) are greater than the effects on the vertical-tail loads and, therefore, the actual loads

experienced by the vertical tail per unit restoring moment are less than for the horizontal tail off or horizontal tail located on wing-chord plane extended.

In general, the effects of change in Mach number on the verticaltail loads for horizontal tail off and horizontal tail located on the wing-chord plane extended are small (figs. 6 to 8). For the T-tail configuration with the horizontal tail in the forward position, however, increasing the Mach number causes rather large reductions in the verticaltail loads, particularly at zero angle of attack. The tail-load reductions are somewhat smaller at the higher angles of attack (figs. 7 and 8). The attendant reduction in directional stability for this configuration is noted in reference 6. The reductions in vertical-tail loads are presumed to be due to shock-interference effects between the horizontal and vertical tails. Reducing the horizontal-tail incidence for the horizontaltail-forward T-tail configuration caused decreases in the vertical-tail loads, with these decreases becoming larger as the Mach number was increased. With the horizontal tail in the rearward position (figs. 6 and 9), the effects of increasing Mach number were to cause only small reductions in the vertical-tail loads, except at the highest Mach number where the loads again increase. These Mach number effects for the horizontal-tail-rearward T-tail configuration are presumed to be due to the shift in the position of the peak minimum pressures associated with the maximum thicknesses of the horizontal tail relative to the vertical-tail lifting pressures and, thereby, the severity of the shock interactions was reduced and more desirable load variations with Mach number were produced for this tail position than for the other horizontaltail locations investigated.

#### Vertical-Tail Center of Pressure

In general, for the various horizontal-tail locations, the effects of increasing the angle of sideslip were to cause rearward movements in the local chordwise centers of pressure for the midspan locations and forward movements near the tip of the vertical tail (fig. 10). Increasing the angle of attack also caused rearward movements of the chordwise centers of pressure except at the tip of the vertical tail where some small forward movement was in evidence (fig. 10).

At small angles of attack and sideslip the addition of the horizontal tail tended to reduce the spanwise variations of the vertical-tail local chordwise centers of pressure. As the angles of attack and sideslip were increased, however, the effects of horizontal-tail position decreased and the local centers of pressure were essentially the same for all tail positions (fig. 10).

Increasing Mach number generally caused forward shifts in the vertical-tail chordwise centers of pressures for the lower spanwise locations and a rearward shift in the vicinity of the tip of the vertical tail. The largest Mach number effects were exhibited by the T-tail configuration with the horizontal tail mounted in the forward location and the smallest Mach number effects were exhibited by the T-tail arrangement with the horizontal tail mounted in the rearward location (fig. 10).

The center of pressure of the total vertical-tail load for the wing-fuselage—vertical-tail configuration (fig. 11) at a Mach number of 0.80 was located at approximately 45 percent of the vertical-tail span and 25 percent of the tail mean aerodynamic chord and was essentially invariant with increases in angle of attack to an angle of approximately 10° where further increases in angle caused an outboard and rather abrupt rearward movement.

The addition of the horizontal tail on the wing-chord plane extended produced below 10° angle of attack, only small changes in the spanwise location of the center of pressure (fig. ll(a)) although the chordwise center-of-pressure location (fig. 11(b)) moved rearward gradually with moderate increases in angle of attack. Above  $\alpha = 10^{\circ}$ , the chord-planeextended horizontal-tail configuration produced the largest outboard and rearward shifts in center-of-pressure location of any of the configurations investigated. Locating the horizontal tail at the tip of the vertical tail in the forward position caused greater outboard and rearward shifts in the center-of-pressure locations than those of the horizontaltail-off configuration throughout the moderate angle-of-attack range at a Mach number of 0.80. Locating the horizontal tail in the rear position at the tip of the vertical tail produced outboard and rearward shifts in the center-of-pressure locations, when compared with those of the horizontal-tail-off configuration that were essentially constant throughout the angle-of-attack range. The large outboard shifts in spanwise center-of-pressure location above 10° angle of attack were, as mentioned previously, due to the fuselage vortices which cause flow-angularity reductions at the inboard spanwise locations and increases for the outboard locations.

In general, the effects of increasing Mach number on the locations of the vertical-tail center of pressure were small for all configurations, except for the T-tail arrangement with the horizontal tail in the forward position where increasing Mach number caused a considerable inboard movement.

#### TABLE I

### PHYSICAL CHARACTERISTICS OF THE MODEL

| Wing:  | )             |
|--|---------------|
| Wing: Span, ft                                     | ζ             |
|  | _             |
| mr -13 P+  | _             |
| War and amorphism chard the                        | _             |
| Λ = ###  |               |
|  | •             |
| management in                                      | 1             |
| o the short group ded                              | _             |
| Airfoil section                                    | +             |
| Horizontal tail:                                   | 2             |
| Span, ft   | <u>ר</u><br>ו |
| Deat should ft                                     | _             |
|  | _             |
| Was a smooth mond a chord the                      | _             |
| A ag ft  |               |
| A success model of                                 | •             |
| Outstand should stroom dest                        | _             |
| Airfoil section                                    | O             |
| Vertical tail:                                     | はス            |
| Span (measured from root chord), ft                | ソ             |
| Part short (located 0 154 ft above fuselage center |               |
| 7 * \  | .2            |
| min should ft                                      | . •           |
| No a manadamamia ahand fit                         | , _           |
| 1  | ,,            |
| Assest motio                                       | _             |
| Marana motific                                     |               |
| A senten abond gupen deg                           | //            |
| Airfoil section                                    | )6            |
|  |               |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL

(a)  $\alpha = -9.4^{\circ}$ ; M = 0.60

|                |                |                |                | for-          |                |                |                       | op for-       | _              |                  |
|----------------|----------------|----------------|----------------|---------------|----------------|----------------|-----------------------|---------------|----------------|------------------|
| <u>x</u>       | B=-3.9°        | ,              | •              | ·             | B=12.7°        | B=-3.9°        | <u>'</u>              | B=3.9°        | 17.            | B=12.7°          |
| c <sub>v</sub> |                | 2/6            | $b_V = 0.1$    | /             |                | ŀ              | Z/.                   | $b_{V} = 0.3$ | <i>38</i>      |                  |
|                |                |                |                |               | Left s         | ide            |                       |               |                |                  |
| •000           | •832           | •558           | •557           | 164           | -1.054         | •829           | •576                  | •577          | 180            | 780              |
| •025           | <b>~</b> •100  | 522<br>342     | 530<br>340     | 982<br>601    | -2.458<br>992  | -•071<br>-•127 | -•542<br>-•396        | 549<br>400    | -1.299<br>840  | -1.155<br>-1.120 |
| •075<br>•150   | -•121<br>-•162 | -•342<br>-•296 | 301            | 441           | 672            | 141            | 305                   | 306           | 496            | -1.054           |
| 250            | 123            | 203            | 207            | 279           | - 396          | 150            | 257                   | 257           | 361            | 964              |
| 350            | 123            | 175            | 179            | 217           | 302            | 175            | 241                   | 244           | 301            | 792              |
| • 450          | 137            | 164            | 166            | 185           | 251            | 189            | <b>-</b> •219         | 223           | 244            | - •585           |
| . •550         | <b>-</b> •109  | 127            | <b></b> 127    | 126           | <b>-</b> •192  | 148            | <b></b> 157           | 161           | 169            | 424              |
| <b>.</b> 650   | 068            | 073            | 079            | 071           | 141            | 102            | ~•105                 | 106           | 107            | 309              |
| ●750           | 027            | 016            | ~•019          | 014           | 100            | 039            | 045                   | 042           | 043            | 203              |
| ●850           | •027           | •037           | •036           | •039          | 033            | •021<br>•059   | •025<br>•062          | •032<br>•064  | •032<br>•062   | -•097<br>-•040   |
| •900           | •048           | •066           | •066           | •064          | Right          | side           | 1002                  | ******        | #00Z           |                  |
| ●025           | 064            | •276           | •275           | •539          | •790           | 086            | •340                  | •341          | •596           | <b>.</b> 769     |
| 075            | 150            | •082           | 082            | 285           | 498            | 143            | 119                   | .123          | •331           | •512             |
| 150            | 162            | •002           | .002           | .151          | •316           | 150            | •018                  | •025          | •183           | •337             |
| •250           | 127            | 027            | 028            | .080          | •204           | 164            | 041                   | 040           | •080           | 199              |
| ●350           | -•139          | 068            | 067            | •011          | •105           | 175            | 084                   | 088           | •009           | •103             |
| 450            | 148            | 105            | 104            | 041           | •027           | 171            | 118                   | 115           | 043            | •C18             |
| •550           | 112            | 084            | ~.088          | <b>~</b> •046 | 001            | 143<br>102     | -•107<br>-•075        | 108<br>074    | -•066<br>-•037 | 015              |
| •650           | <b>→•</b> 066  | 055            | 053<br>021     | 030<br>.002   | 001<br>.008    | 025            | <b></b> 075           | 028           | -•002          | •002             |
| •750<br>•850   | -•023<br>•043  | 016<br>.048    | •043           | •052          | •050           | •046           | •057                  | •059          | •059           | •041             |
| 900            | •062           | •062           | •064           | •066          | •061           | •055           | •057                  | •057          | •052           | •034             |
| ]              |                | 2/             | $b_V = O$      | 66            |                |                | Z/b,                  | =0.93         |                |                  |
|                |                |                |                |               | Left           | side           |                       |               |                |                  |
| •000           | •829           | •545           | •550           | 016           | 373            | •8 <b>0</b> 9  | •515                  | •518          | •062           | 173              |
| .025           | 093            | 667            | 670            | -1.012        | 769            | 189            | 615                   | 520           | 875            | 534              |
| ●075           | -•139          | 440            | 441            | 938           | 752            | -•157          | <b></b> 373           | 374           | 854            | 552              |
| •150           | 162            | 344            | 349            | 685           | <b>73</b> 9    | 148            | 278                   | 276           | 617            | 585              |
| . 250          | 166            | 273            | 276            | 425           | 700            | ~.096          | 200                   | 200           | <b>-</b> •375  | 594              |
| •350           | 180            | 246            | 248            | - 322         | 647            |                |                       |               |                |                  |
| •450<br>•550   | 182<br>159     | 223<br>184     | ~•225<br>~•186 | 256<br>201    | 582<br>511     |                |                       |               |                |                  |
| 650            | -•121          | -•184<br>-•121 | 122            | 133           | 433            | 107            | 153                   | 154           | 297            | 431              |
| 750            | 036            | 052            | 051            | 066           | 352            | 059            | 121                   | 115           | 345            | 394              |
| 850            | •002           | •007           | •004           | 007           | 279            | 025            | 086                   | 081           | 375            | 355              |
| • 900          | •023           | •030           | •027           | •023          | -•238          | •023           | -•045                 | 044           | 370            | 336              |
|                |                |                |                |               | Right          |                |                       |               |                |                  |
| •025           | 098            | •362           | •371           | •614          | • 753<br>• 503 | 143            | .037                  | •268<br>•032  | •470<br>•176   | •581<br>•291     |
| •075<br>•150   | 159<br>159     | •123<br>•034   | •126<br>•034   | •342<br>•192  | •303<br>•328   | 175<br>137     | •037<br><b>-•</b> 014 | <b>-•019</b>  | •066           | •151             |
| •250           | -•139<br>-•180 | 043            | 044            | •073          | •188           | 1              | •014                  | <b>+</b> 017  | -000           | •                |
| 350            | 189            | 098            | 097            | 002           | •084           |                |                       |               |                |                  |
| 450            | 187            | 123            | 120            | 048           | •011           |                |                       |               |                |                  |
| 550            | 159            | <b></b> 118    | 115            | 071           | 021            | 1              |                       |               |                |                  |
| •650           | -•109          | 086            | 081            | 043           | 031            | 089            | 071                   | 072           | 043            | 035              |
| •750           | 039            | 039            | 035            | 012           | 031            | 057            | 050                   | 051           | 037            | 072              |
| 850            | •021           | •041           | •045           | •052          | 015            | •000           | •002                  | •004          | ±007           | - 063            |
| •900           | •050           | •052           | •057           | •055          | 031            | •014           | •014                  | •011          | • 004          | <b>0</b> 90      |

TABLE II. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND  $VERTICAL\ TAIL\ -\ Continued$ 

(b)  $\alpha = -9.6^{\circ}$ ; M = 0.80

|                |  |                | Cp                    | for-           |                  |               |                | Cp for         | ·_               |                  |
|----------------|--|----------------|-----------------------|----------------|------------------|---------------|----------------|----------------|------------------|------------------|
| x              | B=-3.9   | B=0°           | B=39                  | B=7.90         | B=12.70          | B=-3.9°       | B=0°           | B=39           | B=7.9            | B=12.70          |
| <u>x</u>       |  | Z/             | by = 0.               | //             |                  | ľ             |                | by = 0.        | <del>3</del> 8   |                  |
|                |  |                |                       |                | Left s           | ide           |                |                |                  |                  |
| •000           | •851<br>•238                                     | •879           | •718                  | - 352<br>- 891 | 129              | •655          | -862<br>-075   | 735<br>918     | -1.640           | -1:137           |
| •025           | 103  | 104<br>128     | 541<br>375            | 891<br>804     | -1.541<br>-1.223 | 123           | 075<br>147     | 430            | -1.640<br>-1.419 | -1.132<br>-1.100 |
| 150            | 010  | 188            | 343                   | 513            | 964              | .022          | 168            | 342            | - 402            | 978              |
| •250           | 037  | 147            | 224                   | 295            | 573              | 051           | 190            | 287            | 318              | 849              |
| •350           | 067  | -•142          | 195                   | 223            | 381              | 117           | -•207          | -•271          | 284              | 688              |
| • 450<br>• 550 | 117  | 162<br>128     | 181<br>131            | 188<br>132     | -•292<br>-•223   | 172           | -•227<br>-•166 | -•244<br>-•174 | 243<br>164       | 542<br>431       |
| •650           | 074  | -•120<br>-•071 | 071                   | 065            | 168              | 100           | 115            | 105            | 092              | 344              |
| 750            | 030  | 019            | 010                   | 004            | 092              | 039           | 037            | 027            | 019              | 251              |
| ●850           | •034   | .040           | .054                  | •053           | 017              | •037          | •038           | •053           | •058             | 153              |
| ●900           | •062   | •075           | •091                  | • 085          | •019             | •076          | •079           | •094           | •093             | 097              |
|                |  |                | •                     |                | Right            | side          |                |                |                  |                  |
| 025            | 420  | 028            | •285                  | •535           | •764             | 894           | 075            | •340           | •581             | •757             |
| •075<br>•150   | -•411<br>-•346                                   | 148<br>175     | •083<br><b>-•00</b> 2 | .4282<br>.143  | •480<br>•305     | 449           | -•154<br>-•171 | •115<br>•019   | •317<br>•170     | ∙500<br>•325     |
| 250            | 242  | 138            | 025                   | •073           | •198             | - 285         | 182            | -,054          | •064             | 186              |
| • 350          | 213  | 156            | 077                   | 002            | •091             | 261           | 197            | 112            | 017              | •082             |
| • <b>45</b> 0  | 193  | -•171          | 125                   | 065            | 004              | 233           | 201            | 148            | 083              | 014              |
| ●550           | 131  | 125            | 106                   | 074            | 037              | 178           | 165            | 134            | 101              | ~•055            |
| ●650<br>●750   | 063  | 071            | 065<br>019            | 048<br>019     | 036              | 097<br>013    | -•107<br>-•021 | 094<br>019     | 066<br>014       | 051              |
| 850            | 067  | 016<br>.055    | •053                  | -±019<br>•044  | -•028<br>•021    | 070           | •061           | •067           | •054             | 031<br>.009      |
| 900            | •100   | •081           | •076                  | •068           | •038             | •097          | •070           | •074           | •067             | 004              |
|                |  | Z/             | by = 0                | .66            |                  |               | Z/b            | v = 0.93       | 3                |                  |
|                | <del>                                     </del> |                |                       |                | Left             | s ide         |                |                |                  |                  |
| •000           | •637   | ●870           | •721                  | <b>•346</b>    | 040              | 1 .709        | .849           | €667           | +317             | •013             |
| •025           | ●345   | 107            | -1.097                | -1.710         | 830              | •233          | 210            | -1.094         | 990              | 576              |
| ♦075           | •143   | 163            | 466                   | -1.495         | 849              | •031          | 198            | 427            | 910              | 591              |
| •150           | •016   | 195            | 395                   | 828            | 814              | 051           | 172            | -•296          | 736              | 614              |
| •250<br>•350   | 065<br>128                                       | -•203<br>-•216 | 305<br>273            | 355<br>295     | -•718<br>-•663   | 024           | 116            | 218            | 468              | 597              |
| 450            | 163  | 221            | 245                   | 240            | 588              |               |                |                |                  |                  |
| •550           | 152  | 185            | 193                   | 182            | 497              |               |                |                |                  |                  |
| •650           | 106  | 141            | 117                   | 110            | 408              | 096           | 116            | 158            | 323              | 419              |
| ♦750           | 051  | 030            | -#036                 | 040            | 333              | 044           | 051            | 112            | 359              | 378              |
| •850<br>•900   | •022   | •019<br>•049   | •028<br>•063          | •018<br>•047   | -•255<br>-•225   | 008<br>.010   | 006<br>.016    | 082<br>045     | 422<br>407       | -•336<br>-•320   |
| ••••           | •041   |                |                       |                |                  | ļ             |                |                |                  | - 1320           |
| 1              |  |                |                       |                | Right            |               |                |                |                  |                  |
| •025<br>•075   | -1.122<br>489                                    | 087<br>174     | •371<br>•128          | •601<br>•326   | • 760<br>• 500   | -1.082<br>438 | 156<br>207     | •261<br>•004   | •462<br>•140     | •598<br>•290     |
| •150           | 372  | 180            | •025                  | •177           | •329             | 276           | 159            | 039            | •027             | •138             |
| •250           | 314  | 204            | 067                   | •048           | •178             |               |                |                |                  |                  |
| •350           | 288  | 218            | 129                   | 043            | •056             |               |                |                |                  |                  |
| • 450          | 247  | 213            | 161                   | 095            | 022              |               |                |                |                  |                  |
| •550<br>•650   | 111  | -•185<br>-•116 | 148<br>100            | -•112<br>-•071 | -•062<br>-•065   | 114           | 089            | -•071          | 040              | 065              |
| 750            | 033  | 033            | 028                   | 071            | 057              | 129           | 042            | 044            | 062<br>043       | 083              |
| 850            | 054  | •051           | •056                  | •041           | 030              | 048           | •028           | •024           | •010             | 055              |
| •900           | •089   | •078           | •079                  | •061           | 049              | 018           | •040           | •031           | •007             | 084              |
| <u></u>        | <u> </u>   |                |                       |                |                  | <u> </u>      |                |                |                  | ليج بريد         |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(c)  $\alpha = -9.7^{\circ}$ ; M = 0.85

|                  | 1                       |                | Cp             | for-         |                       | Cp for-       |               |                            |                  |                  |  |  |
|------------------|-------------------------|----------------|----------------|--------------|-----------------------|---------------|---------------|----------------------------|------------------|------------------|--|--|
| ر ا              | B=-3.9°                 | R=0°           |                | · B=7.9      | B=12.7°               | B=-39°        |               | B=3.9°                     |                  | B=127°           |  |  |
| x C <sub>v</sub> | × 5.5                   | /              | bv = 0         |              | D-12.1                | 75 - 5.5      | 7             | $b_v = 0$ .                | 17               | D-12.1           |  |  |
| \ \frac{1}{2}    |                         | -/             | 0V - U.        | //           |                       | <u> </u>      |               | Dy - U.                    | <i>56</i>        |                  |  |  |
|                  |                         |                |                |              | Left s                | ide           |               |                            |                  |                  |  |  |
| •000             | •872                    | •893           | •747           | • 466        | •047                  | •690          | •873          | •765                       | • 490            | •033             |  |  |
| ●025<br>●075     | •237<br>•101            | -•115<br>-•142 | 549<br>435     | 860<br>801   | -1.405<br>-1.075      | •311<br>•119  | 095<br>176    | -1.014<br>409              | -1.426<br>-1.291 | -1.021<br>-1.014 |  |  |
| •150             | 019                     | 207            | 395            | 676          | 906                   | 015           | 195           | 392                        | -1.158           | 898              |  |  |
| ●250             | 049                     | 168            | 255            | 346          | ~.635                 | 066           | 213           | 326                        | 305              | 824              |  |  |
| •350             | -•084                   | 162            | 223            | 239          | 455                   | 136           | -•239         | 306                        | -•259            | 703              |  |  |
| • 450<br>• 550   | -+136<br>-+126          | 182<br>144     | 212<br>152     | 192<br>126   | 352<br>340            | 195<br>165    | 261<br>199    | -•275<br>-•195             | 223              | 567              |  |  |
| 650              | 089                     | 090            | -•152<br>-•075 | 061          | 260<br>200            | 120           | 128           | 121                        | -•149<br>-•085   | -•456<br>-•377   |  |  |
| •750             | 044                     | 036            | 021            | 002          | 124                   | 054           | 047           | 035                        | 012              | 290              |  |  |
| ●850             | •025                    | •040           | •049           | •059         | 040                   | ●034          | •035          | •050                       | .065             | 198              |  |  |
| •900             | •059                    | <b>♦</b> 075   | •086           | •090         | •000                  | •076          | •081          | •092                       | •102             | 138              |  |  |
|                  |                         | ·              |                |              | Right                 | side          | <del></del>   | · · · <del>-</del> · · · · |                  |                  |  |  |
| •025             | 420                     | 017            | •283           | •534         | •764                  | 953           | 077           | •330                       | •565             | •750             |  |  |
| ●075<br>●150     | 450<br>396              | 151            | •079           | •274         | •481                  | 542           | 166           | •105                       | • 303            | •494<br>• 222    |  |  |
| •250             | 268                     | -•186<br>-•152 | 018<br>042     | •139<br>•066 | •308<br>•190          | 384<br>308    | 185<br>203    | •003<br>-•074              | •160<br>•048     | •322<br>•183     |  |  |
| 350              | 234                     | 173            | 102            | 017          | •084                  | 279           | 226           | 139                        | 044              | •069             |  |  |
| •450             | -•211                   | 192            | 154            | 091          | 017                   | 246           | 227           | 182                        | 116              | 031              |  |  |
| ●550             | 140                     | 149            | 138            | 097          | 053                   | <b>-</b> •185 | 190           | 172                        | 129              | 081              |  |  |
| <b>∗650</b>      | 069                     | 088            | 092            | 071          | 058                   | 100           | 114           | 128                        | 091              | 081              |  |  |
| ♦750<br>♦850     | -•010<br>•069           | 036<br>.051    | -•045<br>•038  | 037<br>.039  | 050<br>.003           | 013<br>.074   | -•027<br>•058 | -•029<br>•055              | 032              | 058              |  |  |
| 900              | •095                    | •078           | •066           | •060         | •014                  | 101           | •078          | •063                       | •050<br>•062     | -•016<br>-•031   |  |  |
|                  |                         |                | by = 0         |              |                       |               |               | v = 0.93                   |                  |                  |  |  |
|                  |                         |                |                |              | Left                  | s ide         |               | , 0.00                     |                  |                  |  |  |
| .000             | •671                    | <b>879</b>     | •758           | .473         | •092                  | •727          | •859          | •695                       | •416             | •102             |  |  |
| •025             | •338                    | 124            | -15134         | -1.495       | 855                   | 199           | 259           | -1.082                     | -1.463           | 590              |  |  |
| •075             | •136                    | 189            | 855            | -1.343       | 868                   | 002           | 243           | 870                        | -1.398           | 595              |  |  |
| •150             | •004                    | 225            | 442            | -1.228       | 729                   | 086           | 205           | 266                        | 897              | 611              |  |  |
| ●250<br>●350     | -•090<br>-•154          | 242<br>249     | 323<br>301     | 757<br>185   | 686<br>652            | 039           | -•131         | -•238                      | 459              | 597              |  |  |
| 450              | 194                     | 249            | <b>-•278</b>   | -1164        | 604                   |               |               |                            |                  |                  |  |  |
| ●550             | -•178                   | 212            | 216            | 155          | 534                   | ]             |               |                            |                  |                  |  |  |
| e650             | 131                     | 156            | 136            | 102          | 453                   | 113           | 129           | 189                        | -•385            | 418              |  |  |
| <b>♦750</b>      | -•052                   | 044            | 051            | 03B          | -•369                 | 059           | 065           | 144                        | 407              | 381              |  |  |
| • 950<br>• 900   | ●021<br>●044            | •017<br>•048   | •020<br>•055   | •022<br>•058 | -•291<br>-•261        | 016<br>.000   | 014<br>.013   | -•122<br>-•087             | 472<br>453       | 341<br>325       |  |  |
|                  |                         | •••            | ••••           | •070         | Right                 |               |               |                            |                  | • > - >          |  |  |
| •025             | -1.106                  | -•08B          | •360           | •587         | •754                  | -1.099        | 183           | •234                       | •437             | •595             |  |  |
| 075              | 820                     | 185            | •112           | •314         | • 496                 | -•730         | 250           | 045                        | 105              | 275              |  |  |
| •150             | -+377                   | 199            | .006           | .162         | •324                  | 239           | 188           | 079                        | 022              | •119             |  |  |
| •250             | -+320                   | ~• 236         | 102            | •029         | •168                  |               |               |                            |                  |                  |  |  |
| •350<br>•450     | -•299<br>-•2 <b>6</b> 2 | -•247<br>-•253 | 168<br>205     | 074<br>134   | •037<br><b>-</b> •053 | l             |               |                            |                  |                  |  |  |
| •550             | 200                     | -•212          | 186            | 138          | -•095<br>-•095        |               |               |                            |                  |                  |  |  |
| •650             | 116                     | 125            | 136            | 094          | 091                   | 160           | 107           | 095                        | 077              | 090              |  |  |
| •750             | -•035                   | 040            | 041            | 039          | 082                   | 164           | 057           | 062                        | 055              | 102              |  |  |
| •850             | •058                    | •051           | •042           | •043         | 050                   | 091           | •021          | •009                       | •009             | 071              |  |  |
| •900             | •089                    | •082           | •070           | +065         | 075                   | 069           | •033          | •020                       | •006             | 101              |  |  |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND  ${\tt VERTICAL\ TAIL\ -Continued}$ 

(d)  $\alpha = -9.8^{\circ}$ ; M = 0.90

|              | <u> </u>       |                | Cp          | for-             |                       | Cp for-       |                |                |                  |   |  |  |
|--------------|----------------|----------------|-------------|------------------|-----------------------|---------------|----------------|----------------|------------------|---|--|--|
|              | R= 30          | \$ B = 0°      |             | B=7.9°           | B=12.7°               | Q- 30         | · B =0°        | B=3.9          |                  | B=12.7°                                 |  |  |
| x C,         | D = -3.9       |                |             | 1/               | p-12.7                | ρ3.3          |                | 1/             | . 17-            | D=12.7                                  |  |  |
| \ \frac{2}{} |                | - 4/           | bv = 0.     | //               |                       | L             |                | $b_V = 0$      | .38              |   |  |  |
|              |                |                |             |                  | Left s                | ide           |                |                |                  |   |  |  |
| •000         | ∙885           | •917           | .801        | .564             | •167                  | •725          | ∙887           | .816           | •588             | •158                                    |  |  |
| ●025<br>●075 | •203           | -•105<br>-•137 | 479<br>464  | -•811<br>-•746   | -1.258<br>985         | •274<br>•078  | 089<br>183     | 898<br>681     | -1.226<br>-1.133 | -•85 <b>5</b><br>-•858                  |  |  |
| •150         | -067<br>-056   | -•137<br>-•218 | -•435       | ~•689            | ~•854                 | 027           | 196            | 487            | -1.067           | - 833                                   |  |  |
| •250         | 091            | 182            | 314         | 653              | 609                   | 107           | 226            | 353            | 930              | 779                                     |  |  |
| •350         | 125            | 180            | 252         | 352              | -+529                 | 205           | 275            | 376            | 522              | 668                                     |  |  |
| 450          | 190            | 216            | 242         | 249              | 458                   | 284           | 321            | 286            | 197              | 569                                     |  |  |
| •550         | 186            | 174            | 154         | 119              | 362                   | 244           | 227            | 187            | 099              | 469                                     |  |  |
| •650<br>•750 | -•141<br>-•080 | -•100<br>-•036 | 079<br>011  | 046<br>.013      | 287<br>218            | 178<br>086    | 136<br>047     | 112<br>028     | -±044<br>•015    | 416<br>361                              |  |  |
| 850          | 005            | •044           | •061        | •072             | 133                   | •005          | 044            | •057           | •083             | - • 289                                 |  |  |
| 900          | •038           | •080           | .095        | 096              | 085                   | •055          | .088           | •102           | .123             | 235                                     |  |  |
|              |                |                | •           |                  | Right                 | side          |                |                |                  |   |  |  |
| •025         | 390            | 024            | •284        | •529             | •778                  | 871           | 088            | •312           | ø551             | •752                                    |  |  |
| 075          | 515            | 167            | •072        | 274              | 496                   | 714           | 192            | •089           | •292             | •498                                    |  |  |
| •150         | 476            | 214            | 026         | •131             | •316                  | 576           | 210            | 012            | •149             | •325                                    |  |  |
| •250         | 356            | -•170          | 053         | • 055            | •198                  | 351           | 228            | 093            | •029             | •178                                    |  |  |
| • 350        | 289            | -•198<br>-•226 | 122<br>184  | 032<br>118       | •076<br>-•037         | 381<br>272    | -•272<br>-•281 | 177<br>235     | 070<br>157       | .056<br>065                             |  |  |
| ●450<br>●550 | 260<br>169     | -•226<br>-•174 | 176         | -•116<br>-•137   | -•037<br>-•088        | 204           | -•201<br>-•228 | 222            | -•182<br>-•182   | 124                                     |  |  |
| •650         | 090            | 093            | 117         | 106              | 103                   | 121           | 111            | 167            | 138              | 139                                     |  |  |
| •750         | 024            | 031            | 053         | 060              | 108                   | 027           | 028            | 020            | 052              | 115                                     |  |  |
| •850         | •052           | •056           | •039        | .028             | 053                   | •056          | •068           | •055           | .044             | 075                                     |  |  |
| •900         | •079           | •087           | •064        | •056             | 049                   | •086          | •086           | •065           | •060             | -•097                                   |  |  |
|              |                | Z/             | $b_{v} = 0$ | .66              |                       | 1             | z/b            | v = 0.9.       | 3                |   |  |  |
|              |                |                |             |                  | Left                  | s ide         |                | ·              |                  |   |  |  |
| •000         | •701           | ∙895           | •811        | •572             | •197                  | •735          | •869           | •748           | •510             | •199                                    |  |  |
| 025          | •296           | -•116          | 990         | -1.291           | 920                   | •157          | 259            | 955            | -1.280           | 592                                     |  |  |
| •075         | •095           | -•196<br>-•248 | 854<br>738  | -1.162<br>-1.130 | 981<br>583            | 080<br>192    | -•327<br>-•251 | 4960<br>735    | -1.237<br>-1.029 | -•599<br>-•593                          |  |  |
| •150<br>•250 | 040<br>145     | 286            | -•453       | -1.058           | -•569                 | 095           | <b></b> 129    | <b>-</b> •278  | 945              | 560                                     |  |  |
| 350          | 237            | 303            | 286         | 823              | 583                   |               | • 1            | •2.0           | • • • •          | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |  |
| · 450        | 293            | 309            | 231         | 367              | 581                   |               |                |                |                  |   |  |  |
| •550         | 255            | 252            | 216         | 151              | 559                   |               |                | 105            |                  | . 25                                    |  |  |
| •650<br>•750 | -•189<br>-•074 | -•125<br>-•048 | 134<br>043  | 040<br>.019      | -•517<br>-•453        | 153<br>087    | -•136<br>-•067 | 185<br>181     | -•351<br>-•416   | -•425<br>-•399                          |  |  |
| 850          | 009            | •028           | 028         | •060             | -•453<br>-•373        | 037           | 009            | -•131<br>-•137 | 442              | 365                                     |  |  |
| •900         | •023           | •059           | •065        | •082             | 342                   | 017           | •020           | 172            | 406              | 358                                     |  |  |
|              | <u> </u>       |                |             |                  | Right                 | side          |                |                |                  |   |  |  |
| •025         | 977            | 099            | •337        | ø569             | •752                  | 973           | <b>-</b> •202  | •206           | •420             | • 590                                   |  |  |
| •075         | -4864          | 211            | •093        | <b>●298</b>      | <ul><li>491</li></ul> | -1.000        | 354            | 109            | 080              | •270                                    |  |  |
| •150         | -+724          | 230            | 016         | •150             | •320                  | 733           | 243            | 164            | 060              | •103                                    |  |  |
| • 250        | -•477<br>-•296 | -•294<br>-•306 | 136<br>226  | •001<br>••115    | •158<br>•011          |               |                |                |                  |   |  |  |
| •350<br>•450 | 253            | 302            | 278         | -•115<br>-•204   | -•099                 |               |                |                |                  | l                                       |  |  |
| •550         | 225            | 250            | 238         | 214              | 156                   |               |                |                |                  | l                                       |  |  |
| •650         | -•139          | 104            | 168         | 142              | 156                   | 216           | 119            | 112            | 098              | 141                                     |  |  |
| •750         | 053            | 041            | 049         | 059              | 144                   | 260           | 051            | 070            | 066              | 152                                     |  |  |
| •850         | •042           | •062           | •048        | •036             | 095                   | 204           | •026           | •014           | •004             | -•105                                   |  |  |
| •900         | •078           | •094           | •073        | •060             | <b>-</b> •127         | -•197         | •042           | •025           | • 004            | 133                                     |  |  |
|              |                |                |             |                  |                       | <del></del> - |                |                |                  |   |  |  |

TABLE II. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND

VERTICAL TAIL - Continued

(e)  $\alpha = -9.8^{\circ}$ ; M = 0.92

|                     |                |                                       | •              | for-                   |                  |               |               | Cp for         | -                |                  |
|---------------------|----------------|---------------------------------------|----------------|------------------------|------------------|---------------|---------------|----------------|------------------|------------------|
| X                   | B = -3.9       | B=0°                                  | B=3.9          | B=7.9                  | · B=12.70        | B=-3.9°       | B=0°          | B=39           | · B=7.9          | · B=12.7         |
| $\frac{x}{c_{\nu}}$ |                | Z                                     | by =0          | .//                    | 1                |               | Z/            | by = 0         | 38               |                  |
|                     |                |                                       |                |                        | Left s           | ide           |               |                |                  |                  |
| 000                 | •919           | •929                                  | .811           | •580                   | •101             | •755          | •B84          | •819           | •601             | •092             |
| )25<br>)75          | •230<br>•091   | -•109<br>-•147                        | 469<br>492     | <b>-</b> •851<br>-•749 | -1.456           | •295          | 098           | 864            | -1.172           | -1.039           |
| 150                 | 040            | -•237                                 | -•471          | 724                    | -1.184<br>-1.057 | •093<br>••018 | 203<br>239    | -•733<br>-•588 | -1.090<br>-1.049 | -1.049<br>-1.050 |
| 250                 | 080            | 214                                   | 509            | 734                    | 801              | 101           | 253           | 553            | -16049<br>-6976  | 972              |
| 350                 | 120            | 210                                   | 302            | 510                    | 712              | 194           | 305           | - 424          | 762              | - 839            |
| 50                  | 195            | 254                                   | 285            | 382                    | 626              | 300           | 367           | 410            | 545              | 722              |
| 50                  | 240            | 261                                   | 188            | 193                    | 535              | 329           | 358           | 166            | 100              | 646              |
| 0                   | 172            | 138                                   | 079            | 063                    | 470              | 216           | 143           | 081            | 029              | 630              |
| 0                   | OBO            | 044                                   | 005            | •009                   | 417              | 066           | 045           | 010            | .026             | 587              |
| 0                   | •008           | •032                                  | •061           | • 066                  | 341              | •026          | •041          | <b>•</b> 064   | •086             | 516              |
| 0                   | •050           | •071                                  | •098           | •095                   | -•280            | •075          | •099          | .108           | •122             | 436              |
|                     |                |                                       | -              |                        | Right            | side          |               |                |                  |                  |
| 25<br>75            | -•365<br>-•522 | 031<br>186                            | •295<br>•078   | ●544<br>●283           | • 743<br>• 428   | 822<br>731    | 105<br>220    | •318<br>•093   | •551<br>•290     | • 708<br>• 422   |
| 50                  | 494            | -•241                                 | 031            | 135                    | •230             | 616           | 245           | 015            | •148             | 233              |
| 0                   | - 507          | 197                                   | 058            | •055                   | •095             | 563           | 241           | 017            | •032             | •074             |
| ŏ                   | 332            | - 223                                 | 128            | 042                    | 043              | 417           | 308           | 180            | 079              | 066              |
|                     | 316            | 274                                   | 201            | 141                    | 178              | 423           | 370           | 279            | 199              | 211              |
|                     | 185            | 252                                   | 223            | 180                    | 246              | 168           | 338           | 307            | 250              | - 299            |
|                     | 070            | 122                                   | 155            | 162                    | 280              | 074           | 120           | 201            | 210              | - 336            |
|                     | 003            | 044                                   | 068            | 096                    | 302              | •004          | 028           | 035            | 077              | 305              |
|                     | •073           | •046                                  | •030           | •009                   | 230              | •083          | •062          | •053           | •026             | 245              |
|                     | •103           | •080                                  | •062           | •040                   | 224              | •110          | •085          | <b>.</b> 072   | .051             | 270              |
|                     |                | Z                                     | 1bv = 0        | 0.66                   |                  |               | Z/b           | y = 0.93       | 3                |                  |
|                     |                | · · · · · · · · · · · · · · · · · · · |                |                        | Left             | side          |               |                |                  |                  |
| 0                   | •732           | ●892                                  | .819           | •591                   | •143             | e764          | .864          | ●757           | ●528             | •133             |
|                     | •309           | 124                                   | 938            | -1.229                 | -1.066           | •167          | 266           | 896            | -1.187           | <b>-</b> .807    |
|                     | •107           | 215                                   | 827            | -1.115                 | -1.004           | 076           | 362           | 920            | -1.178           | ~ • 755          |
|                     | 034            | 268                                   | 789            | -1.087                 | ~•721            | 216           | 328           | 760            | 993              | - • 757          |
|                     | 145            | 320                                   | 709            | -1.069                 | 712              | 114           | <b>-</b> •179 | 648            | 888              | 716              |
|                     | 257            | -•394<br>-•397                        | -•623<br>-•273 | -1.008                 | -•722            |               |               |                |                  |                  |
|                     | 348            | 397<br>345                            | 104            | 637<br>389             | -•723<br>-•715   |               |               |                |                  |                  |
|                     | 295            | -•132                                 | -4085          | 195                    | -•693            | 119           | 141           | 151            | 605              | 594              |
|                     | -031           | 032                                   | 022            | 041                    | 640              | 057           | 069           | 141            | 503              | - 4577<br>- 4577 |
|                     | •015           | •020                                  | •040           | 051                    | 575              | 013           | 013           | 176            | 422              | - 542            |
|                     | •044           | .051                                  | •071           | .081                   | 532              | •004          | •015          | 189            | 376              | 525              |
|                     | -              |                                       |                |                        | Right            | side          |               |                |                  |                  |
| 5                   | 906            | 116                                   | •334           | •557                   | •700             | <b></b> 897   | 207           | ●206           | •412             | •524             |
| ,                   | 823            | 232                                   | 092            | 291                    | 416              | - 944         | 419           | 124            | 061              | •163             |
|                     | 763            | <b>-</b> •253                         | 018            | .143                   | .228             | 756           | 316           | 201            | 083              | 024              |
|                     | 730            | 328                                   | 145            | 012                    | •042             |               |               |                |                  |                  |
|                     | 662            | 413                                   | <b>25</b> 3    | 144                    | 121              |               |               |                |                  |                  |
|                     | -•296          | 394                                   | <b>-</b> •337  | 266                    | 256              |               |               |                |                  |                  |
|                     | 097            | 347                                   | 349            | 313                    | 342              |               |               |                |                  |                  |
| )                   | 068            | 075                                   | 192            | 235                    | <b>-•35</b> 2    | 126           | 113           | <b>-</b> •090  | 146              | 313              |
|                     | 014            | 036                                   | 032            | 077                    | 332              | 149           | 068           | 053            | 090              | 331              |
|                     | •070           | •058                                  | •054           | •021                   | 253              | 153           | •015          | •023           | 016              | 264              |
|                     | •100           | •091                                  | •081           | .048                   | <b>-</b> •286    | 174           | •033          | •032           | 023              | 290              |

TABLE II. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND  ${\tt VERTICAL\ TAIL\ - Continued}$ 

(f)  $\alpha = 0^{\circ}$ ; M = 0.60

|                |                |                |              | 60-           |                  | T              |                |                |                |                  |
|----------------|----------------|----------------|--------------|---------------|------------------|----------------|----------------|----------------|----------------|------------------|
| ł              | 1              | -10 -          | Cp           | for-          |                  |                |                | Cp for         | -              |                  |
| x - C_v        | 19 = -39       | 9° B=0°        | /            | P 8=7.9       | B=12.70          | B=-3.9         | · 13 =00       | B=3.90         | B=79           | B=1270           |
| C <sub>v</sub> |                | z,             | 16v = 0      | .//           |                  |                | Z/             | by = 0.        | <del>38</del>  |                  |
|                |                |                |              |               | Left s           | ide            |                | <del></del>    | -              |                  |
| •000           | +615           | +643           | .345         | 487           | -1.393           | •311           | • 736          | •324           | 450            | -1.181           |
| •025<br>•075   | •269<br>•133   | 092<br>111     | 520<br>369   | -1.130<br>683 | -2.260<br>-1.607 | •329           | -•090          |                | -1.156         | -1.137           |
| 150            | 4036           | 136            | 304          | 478           | -1.607<br>683    | •149<br>•052   | 129<br>141     | -•430<br>-•316 | -1.042<br>776  | -1.107<br>-1.051 |
| •250           | •024           | 097            | 200          | 293           | 416              | -013           | 150            | 262            | 422            | -1.007           |
| •350           | 015            | 104            | 169          | 231           | 339              | 068            | 162            | ~ . 246        | 307            | 865              |
| a450           | 054            | 113            | 155          | 193           | 286              | -•094          | 164            | 223            | 247            | 655              |
| •550           | 052            | 101            | 113          | 137           | 290              | 084            | -,139          | 160            | 184            | 490              |
| •650           | 034            | 064            | 067<br>009   | 091           | -•200            | 066            | 104            | 107            | 121            | 362              |
| •750<br>•850   | -040           | 016<br>.033    | •035         | 042<br>.014   | -•116<br>-•023   | 020            | ~•029<br>•029  | 039            | 051            | 239              |
| 900            | 070            | •068           | •061         | •042          | •014             | 4073           | 1027           | •024<br>•061   | •026<br>•061   | 125<br>060       |
| 1              |                |                |              |               | Right            | side           |                | 1001           |                |                  |
| .025           | 442            | 029            | •319         | <b>4609</b>   | 4847             | 613            | 062            | •377           | •606           | •745             |
| •075           | 364            | 10B            | •13í         | •348          | •563             | 408            | 120            | 152            | • 362          | •528             |
| ♦150           | -•290          | 127            | •038         | •208          | .377             | 313            | 134            | •054           | .217           | .373             |
| •250           | 197            | 101            | •010         | .133          | •268             | -+244          | -+143          | 009            | •121           | .242             |
| •350           | 167            | 108            | 030          | •066          | •173             | 225            | -,155          | 060            | •042           | a154             |
| .450<br>.550   | -+151<br>-+103 | 127<br>099     | 074<br>055   | •005<br>-•002 | •093<br>•059     | 121<br>158     | -,101          | 074            | 051            | 025              |
| •650           | 052            | 060            | 039          | •007          | •054             | 096            | -,134<br>-,090 | 086<br>060     | -•023<br>-•011 | •033<br>•026     |
| •750           | 006            | 023            | - 023        | 010           | •042             | 027            | -1029          | 013            | •017           | 028              |
| ▶850           | +052           | .042           | .035         | •059          | •070             | .047           | 1042           | •040           | •061           | •045             |
| •900           | 1.099          | 1.102          | 1.104        | 1.102         | 1.109            | •073           | 061            | •059           | .066           | •038             |
|                |                | Z/             | $b_{v} = C$  | .66           |                  |                | Z/b,           | -0.93          |                |                  |
|                |                |                |              |               | Left             | side           |                |                |                |                  |
| .000           | •225           | •713           | •261         | 410           | 672              | •415           | 681            | •228           | 214            | -,472            |
| • 025          | •343           | 122            | 830          | -1.142        | 732              | •211           | - 215          | 739            | 748            | 509              |
| •075           | •158           | 145            | 483          | -1.098        | 711              | •036           | - 159          | 379            | 753            | 523              |
| •150<br>•250   | -043           | 159            | 367          | 927           | 697              | 050            | - 150          | 279            | 685            | 579              |
| •350           | 077            | -•162<br>-•169 | 283<br>244   | 599<br>382    | ~•669<br>-•641   | 096            | - 155          | 234            | 515            | 562              |
| 450            | 105            | 173            | 223          | 270           | 604              |                |                |                |                |                  |
| •550           | 105            | 155            | 183          | 205           | 562              |                |                |                |                | I                |
| •650           | 068            | 106            | 118          | 137           | 513              | 087            | 085            | 116            | 317            | 386              |
| ₽750           | 034            | 041            | 051          | 072           | 441              | 038            | - 032          | 074            | 289            | 362              |
| •850           | •020           | •015           | •012         | 016           | 372              | 013            | 010            | 046            | 254            | 337              |
| 900            | •043           | •033           | •031         | •007          | 341              | •003           | 022            | 037            | -•224          | 323              |
|                |                |                |              |               | Right            |                |                |                |                |                  |
| •025<br>•075   | -•682<br>-•465 | 074<br>136     | •393<br>•152 | ●595<br>■348  | •700<br>•491     | 611<br>355     | - 132<br>- 162 | 261            | 408            | •498             |
| 150            | 318            | 141            | •056         | 210           | 342              | 2 <b>6</b> 2   | 150            | •024<br>-•048  | •135<br>•014   | •247<br>•098     |
| -250           | 271            | 157            | 027          | •100          | 212              | 4              |                | *****          | -017           | •070             |
| •350           | 244            | 169            | 081          | •019          | •117             |                |                |                |                | 1                |
| • 450          | 207            | 166            | 104          | 028           | •042             |                |                |                |                |                  |
| •550           | 161            | 143            | 097          | 037           | •010             |                |                | _              |                | ]                |
| #650<br>#750   | 105            | ~+097          | 069          | 025           | 011              | 098            | 078            | 081            | 079            | 107              |
| .850           | -•043<br>•040  | -•048<br>•031  | 030<br>.040  | 011<br>.042   | 032<br>023       | -,068<br>-,015 | -: 034         | 060            | 067            | 113              |
| 900            | •066           | •059           | •061         | .042<br>.054  | 051              | 006            | .019<br>⊧031   | 011<br>.000    | 025<br>032     | 109<br>134       |
|                |                |                |              |               |                  |                |                | • 000          | 1032           | - 0 1 2 7        |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(g) a = 0°; M = 0.80

|                   |              |               | Cp.             | for-           |                |               |              | Cp for        | _                     |                  |
|-------------------|--------------|---------------|-----------------|----------------|----------------|---------------|--------------|---------------|-----------------------|------------------|
| $\frac{x}{C_{v}}$ | B=-3.9       | 1′            | <u> </u>        | B=79°          | B=12.7°        | B=-3.9°       |              | B=39°         | B=7.9°                | B=12.70          |
| $c_{v}$           |              | z/            | by = 0.1        | 7              | **             |               | Z/           | by = 0.       | 38                    |                  |
|                   |              |               |                 |                | Left s         | ide           |              |               |                       |                  |
| •000              | •713         | •667          | .534            | .177           | 326            | •484          | •773         | •533          | +044                  | 579              |
| • 025             | ●284         | 880.          | 527             |                | -1.538         | ●330          | 081          | 931           | -1.345                | 961              |
| • 075             | *144         | 094           | 361             |                | -1.260         | +154          | 129          | 440           | -1.131                | 969              |
| •150<br>•250      | •043         | 140<br>100    | 315<br>201      | 505<br>302     | 978<br>639     | •056<br>-•018 | 144<br>155   | 330<br>269    | 871<br>486            | - 4925<br>- 4848 |
| •350              | 024          | 115           | 164             | 236            | 408            | 076           | 177          | 247           | 311                   | 749              |
| 450               | ~.075        | 134           | 152             | 197            | 325            | 116           | 187          | 219           | 253                   | - 631            |
| •550              | 070          | 106           | 102             | 136            | 283            | 105           | 152          | 152           | 180                   | 515              |
| •650              | 050          | 065           | 053             | 082            | 187            | 085           | 108          | 090           | 113                   | 422              |
| •750              | 019          | 017           | •013            | 026            | ~.128          | 027           | 022          | 014           | 031                   | 326              |
| .850<br>.900      | •036<br>•072 | •048<br>•083  | .070<br>.095    | .034<br>.070   | -•051<br>-•006 | ●043<br>●085  | •046<br>•089 | •063<br>•097  | •050                  | 223              |
| • 700             | -072         | •003          | 1075            | *070           |                |               | 1407         | 1091          | •095                  | 158              |
|                   |              |               |                 |                |                | side          |              |               |                       |                  |
| ●025<br>●075      | 401<br>379   | •015<br>••089 | •345<br>•158    | •606           | •828<br>•843   | 931<br>428    | 037          | •379<br>•172  | 603                   | .749             |
| •150              | -310         | 118           | •066            | .358<br>∎224   | •562<br>•390   | 327           | 118<br>128   | •072          | •367<br>•230          | •537<br>•383     |
| 250               | 209          | 098           | •029            | 147            | 280            | 263           | 144          | •004          | •124                  | 251              |
| .350              | 182          | 118           | 022             | •072           | •170           | 235           | 161          | 053           | .046                  | 149              |
| • 450             | 163          | 134           | 068             | .004           | <b>.</b> 084   | 128           | 100          | 067           | 046                   | 028              |
| • 550             | 105          | 104           | 058             | ~.005          | •054           | 160           | 143          | 090           | 037                   | •022             |
| •650              | 050          | 055           | 034             | 002            | •034           | 090           | 094          | 056           | 023                   | •005             |
| ∙750<br>•850      | •005<br>•069 | 015           | 008             | .010           | •016           | 007           | 009          | •001          | •017                  | •011             |
| • 900             | 1.164        | •058<br>1•166 | .053<br>1.167   | .069<br>1.166  | .048<br>1.160  | .074<br>.095  | •066<br>•086 | ∗066<br>•087  | •075<br>•087          | •023<br>•006     |
|                   |              |               | $b_{\nu} = 0.6$ |                |                |               |              | =0.93         |                       |                  |
|                   |              | <del></del>   | - 7 - 0.0       |                | Left           | side          | -/ 50        | ,-0.93        |                       |                  |
| •000              | •422         | .748          | •473            | •060           | 404            | •501          | •704         | •395          | •075                  | - 285            |
| •025              | 33.7         | 118           | -1.061          | 919            | 695            | 209           | -0241        | -1.001        | 620                   | - 453            |
| .075              | •155         | 152           | 555             | 882            | 678            | •00B          | 184          | 555           | 611                   | - 455            |
| .150              | •039         | 171           | 383             | 825            | 664            | 073           | 163          | 276           | 606                   | 514              |
| •250              | 038          | 175           | 290             | 746            | 633            | 119           | <b></b> 171  | 232           | 533                   | 520              |
| • 350             | 097          | -•186         | 246             | 613            | 602            |               |              |               |                       |                  |
| .450<br>.550      | 136<br>127   | 189<br>166    | 218<br>170      | -•448<br>-•308 | 565<br>518     |               |              |               |                       |                  |
| 650               | -091         | 104           | 093             | 188            | 481            | 084           | 066          | 102           | 308                   | 364              |
| • 750             | 039          | 023           | 030             | 088            | -429           | 032           | 011          | 051           | 276                   | 342              |
| •850              | •043         | •034          | .040            | 014            | 371            | •002          | •037         | 024           | 237                   | 314              |
| • 900             | •050         | •061          | •067            | •020           | <b>-•3</b> 45  | •023          | •055         | 013           | 211                   | -•299            |
|                   |              |               |                 |                | Right          | side          |              |               |                       |                  |
| • 025             | -1.041       | 046           | .395            | •595           | •715           | 958           | -134         | • 264         | •415                  | 1528             |
| •075<br>•150      | 497<br>343   | 138<br>138    | •167<br>•073    | •352<br>•221   | •513<br>•359   | 439<br>264    | 184<br>163   | •007<br>-•064 | •135<br><b>-</b> •002 | • 268<br>• 102   |
| • 250             | 298          | -•171         | 021             | •103           | 228            | - 4 2.04      | -1103        |               | -4002                 | •102             |
| • 350             | 257          | 181           | 081             | .014           | 109            |               |              |               |                       |                  |
| .450              | 214          | 180           | 113             | 045            | •028           |               |              |               |                       |                  |
| •550              | 160          | 143           | 105             | 056            | 017            |               |              |               |                       | į                |
| •650              | -•093        | 092           | 06B             | 036            | 031            | 090           | 066          | 061           | 074                   | 119              |
| €750<br>•850      | -•021        | 023           | 014             | 011            | 049            | 048           | 012          | 039           | 054                   | 121              |
| 900               | •063<br>•099 | •066<br>•095  | .067<br>.087    | .054<br>.070   | -•037<br>-•068 | •013<br>•023  | •055<br>•069 | •032<br>•038  | 014<br>016            | 102<br>128       |
| • / 5 🗸           | • • • • •    | • • • • •     | 01              | 4010           | • 550          | • U Z 3       | ,            |               |                       | -0170            |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued  $(h) \ \alpha = 0^{\circ}; \ M = 0.85$ 

| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                | 1         | ,    | Cp                 | for         |         |          |        | 0 6           |               | -       |
|---|----------------|-----------|------|--------------------|-------------|---------|----------|--------|---------------|---------------|---------|
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $   |                | 10-       |      |                    | for-        |         |          |        | <del>-,</del> |               |         |
|   | <u> </u>       | 19 = -3.9 |      |                    |             | B=12.7° | B=-3.9°  | B=0°   | B=3.9°        | B=7.9°        | B=12.70 |
|   | C <sub>v</sub> |           | Z    | 16v = 0            | .//         |         |          | Z      | by = 0.       | <del>38</del> | **      |
| 4025   \$279  |                |           |      | •                  |             | Left s  | ide      |        |               |               |         |
| 0025   1279   1087   -3295   -14682   -14311   328   -0.76   -1.084   -2.209   -8776   1453   -1088   -3865   -1402   -1210   -1220   0.049   -1.147   -3.956   -1.734   -8.892   1500   0.042   -1.136   -3.400   -1.120   -1.220   0.049   -1.147   -3.956   -1.734   -8.892   -3.500   -1.037   -1.211   -1.194   -4.001   -5.17   -0.093   -1.181   -2.79   -4.660   -7.211   -1.044   -1.081   -1.024   -1.096   -1.252   -4.600   -1.081   -1.096   -1.052   -1.080   -1.081   -1.096   -1.071   -1.024   -1.016   -2.098   -1.660   -7.211   -1.016   -2.097   -1.050   -1.016   -1.017   -1.024   -1.016   -2.097   -1.050   -1.016   -1.017   -1.024   -1.018   -1.025   -1.018   -1.025   -1.018   -1.025   -1.018   -1.027   -1.025   -1.018   -1.025   |                |           | •682 | •589               | •076        | 137     | 4538     | . 787  | <b>•593</b>   | 077           | -4387   |
| 150   |                |           |      |                    |             |         | •328     |        | -1.084        | -2.209        | 876     |
| 220   | 1              |           |      |                    |             |         |          |        |               |               |         |
| 350   |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                |           |      |                    |             |         |          |        |               |               |         |
| 100   |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{c} 7500 \\ 8500 \\ 6028 \\ 6$ |                |           |      |                    |             |         |          |        |               |               | 516     |
| **************************************  |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                |           |      |                    |             |         |          |        |               |               |         |
| **Right s/de**  **O25*** -338*** **\text{olive}** 339*** 4455*** 8833** -*\text{oright}** -\text{olive}** 339*** -086*** 142*** 141*** 550*** -431*** -114*** 155*** 139*** 537*** 150*** -232*** -1232*** -223*** -098*** 020*** -120*** 281*** -279*** -131*** 054*** -4028*** 881*** 2200*** -223*** -1098*** 020*** -120*** 281*** -279*** -1347*** -018*** -161*** 280*** 2830*** -221** -1228*** -044*** -224*** 114*** -227*** -114*** -080*** -260*** -151*** -106*** -083*** -230*** -220*** -120*** -224*** -174*** -109*** -208*** -209*** -209*** -200***   |                |           |      |                    |             |         |          |        |               |               |         |
| 1025  |                |           |      |                    | <del></del> |         | 1        |        |               |               |         |
| 0075  |                |           | •019 | •339               | ø 455       |         |          | -+037  | •366          | 4435          | •750    |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$   |                |           |      |                    |             |         |          |        |               | .139          | .537    |
| 0350  |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{c} 450 \\ 550 \\ -315 \\ -315 \\ -3106 \\ -3081 \\ -3061 \\ -3061 \\ -3081 \\ -388$                                     |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$   |                |           |      |                    |             |         |          |        |               |               |         |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$   |                |           |      |                    |             |         |          |        |               |               |         |
| *850 *071 *086 *044227 *042 *081 *074 *063220 *014 *090 *1.187 *1.192 *1.182 *1.182 *1.184 *110 *1.03 *0.079202002 *2/b_y = 0.66 *2/b_y = 0.66 *2/b_y = 0.93  |                | 050       | 061  | 058                |             |         |          |        |               |               |         |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                |           |      |                    |             |         |          |        | 019           | 296           | 009     |
|   |                |           |      |                    |             |         |          |        |               |               |         |
| Left side    Left   Side  | •900           | 10187     |      |                    |             | 14184   | •110     |        |               | 202           | 002     |
| **************************************  |                |           |      | D <sub>V</sub> = 0 | 7.66        |         | <u> </u> | _ 2/0  | v = 0.93      |               |         |
| 0.025   |                |           |      |                    |             | Left    | s ide    |        |               |               |         |
| **************************************  |                |           |      |                    |             |         |          |        |               |               |         |
| **150   |                |           |      |                    |             |         |          |        |               |               |         |
| -250  |                |           |      |                    |             |         |          |        |               |               |         |
| **************************************  |                |           |      |                    |             |         |          |        |               |               |         |
| **************************************  |                |           |      |                    |             |         |          | -1172  | - 6233        | -11004        |         |
| **************************************  | • 450          | 159       |      |                    | 674         |         |          |        |               |               |         |
| **************************************  |                |           |      |                    |             |         |          |        |               |               |         |
| *850 *041 *049 *041258349 *010 *042037610328 *0900 *055 *069 *070227319 *026 *069021570315 ***  ***Right side**  ***O25 -1.149050 *382 *428 *712 -1.108150 *242 *223 *530 ***  ***O75436137 *153 *133 *512470204032154 *263 ***  ***150362143 *051037 *359264178102349 *088 ***  ***250303180044190 *220 ***  ***350266196113314 *103 ***  ***450227191148391 *018 ***  ***550168158142411036 ***  ***650093096090382051089070077427141 ***  ***5500160130313300062044007050389135 ***  ***850 ***078 ***079 ***062229042 ***  ***010 ***024021321311   |                | ,         |      |                    |             |         |          |        |               |               |         |
| *900 *055 *069 *070227319 *026 *069021570315  **Right Side**  ***O25 -1.149050 *382 *428 *712 -1.108150 *242 *223 *530 *075436137 *153 *133 *512470204032154 *263 *150362143 *051037 *359264178102349 *088 *250303180044190 *220 *350266196113314 *103 *450227191148391 *018 *550168158142411036 *650093096090382051089070077427141 *750016013031330062044007050389135 *850 *078 *079 *062229042 *019 *072 *021321111   |                |           |      |                    |             |         |          |        |               |               |         |
| Right side  **O25   |                |           |      |                    |             |         |          |        |               |               |         |
| -0.25   |                | 1177      |      | •0.0               |             |         |          |        | 1021          | - 6570        | -4515   |
| **************************************  | •025           | -1.149    | 050  | •382               | <b>▲428</b> |         |          | -4 150 | •2▲2          | <u> </u>      | 4530    |
| **150   |                |           |      |                    |             |         |          |        |               |               |         |
| 0.250   | ·150           |           |      |                    |             |         |          |        |               |               |         |
| 0.450   |                |           |      |                    |             |         |          |        |               |               | 4       |
| 0.550   |                |           |      |                    |             |         |          |        |               |               |         |
| 0.650   |                |           |      |                    |             |         |          |        |               |               |         |
| •750 -•016 -•013 -•031 -•330 -•062 -•044 -•007 -•050 -•389 -•135<br>•850 •078 •079 •062 -•229 -•042 •019 •072 •021 -•321 -•111  |                |           |      |                    |             |         | 089      | 070    | 077           | m. 427        | _,,,, [ |
| .850 .078 .079 .062229042 .019 .072 .021321111  |                |           |      |                    |             |         |          |        |               |               |         |
|   |                |           |      |                    |             |         |          |        |               |               |         |
|   |                |           |      |                    |             |         |          |        |               |               |         |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(i)  $\alpha = 0^{\circ}$ ; M = 0.90

|                  |                |                | Cp             | for-                  |                |                |                | Cp for         | _                 |               |
|------------------|----------------|----------------|----------------|-----------------------|----------------|----------------|----------------|----------------|-------------------|---------------|
| x C <sub>v</sub> | B=-3.9         | B=0°           |                |                       | B=12.7°        | B=-3.9°        | B=0°           | B=39°          | B=7.9°            | B=12.7°       |
| C <sub>V</sub>   |                | Z,             | 1bv = 0        | .//                   |                |                | Z,             | 1by = 0.       | <del>38</del>     |               |
|                  |                | -              |                |                       | Left s         | ide            |                |                |                   |               |
| •000<br>•025     | ∙775<br>•284   | •693<br>•050   | .645<br>462    | •419<br>••939         | •025<br>-1•114 | •600<br>•318   | •792<br>-•084  | •664<br>-•944  | •335<br>-1•301    | 189<br>743    |
| •075             | 147            | <b>~•089</b>   | 383            | -•769                 | 971            | 139            | 140            |                | -1.169            | 755           |
| •150             | •030           | 156            | 378            | 645                   | 828            | 039            | 162            |                | -1.053            | 769           |
| •250             | •011           | 118            | 241            | 494                   | 659            | 041            | 185            | 324            | 610               | 749           |
| •350<br>•450     | 052<br>114     | 146<br>180     | -•218<br>-•206 | 331<br>260            | 564            | 117            | 226            | 331            | 453               | 689           |
| •550             | -121           | 149            | -4135          | 143                   | ~.508<br>~.425 | 194<br>177     | -•256<br>-•202 | 269<br>174     | 296<br>106        | 614<br>534    |
| 650              | 101            | 097            | 068            | 067                   | - 330          | 126            | 134            | 101            | 043               | 448           |
| •750             | -•048          | 023            | .010           | 002                   | 229            | 053            | 029            | 019            | .018              | - 1394        |
| ●850             | •021           | •050           | •069           | •057                  | 133            | •031           | •055           | •065           | .087              | 314           |
| •900             | ●057           | •087           | •101           | •088                  | Right          | 51de           | •099           | •109           | •124              | 254           |
| •025             | 337            | •025           | •336           | •600                  | •833           | 890            | 044            | •352           | .581              | • 745         |
| 075              | 411            | 093            | 148            | •361                  | .567           | 616            | -129           | •150           | .353              | 532           |
| e150             | -•379          | 140            | .044           | •218                  | • 396          | 403            | 154            | •048           | .217              | <b>•376</b>   |
| • 250            | 260            | 122            | •009           | •141                  | <b>♦279</b>    | 323            | 174            | 030            | •108              | .253          |
| ●350<br>●450     | -•237<br>-•216 | 152<br>181     | 056<br>116     | •055<br><b>-</b> •027 | •166           | -+324<br>-+200 | 213<br>177     | 100            | .018              | .138          |
| •550             | 132            | ~•145          | 112            | 049                   | .063<br>.019   | 178            | 193            | -•131<br>-•164 | -•065<br>-•097    | •009<br>~•031 |
| •650             | 061            | 085            | 080            | 040                   | 004            | ~.094          | 117            | 109            | 073               | - 4056        |
| <b>₽750</b>      | •006           | 018            | 029            | 008                   | 020            | 005            | 010            | 023            | 008               | -+045         |
| •850             | •078           | +065           | •048           | •061                  | •008           | ●085           | •078           | •061           | •067              | 025           |
| •900             | •101           | •098           | •069           | •076                  | •009           | •115           | •106           | •085           | •086              | 046           |
|                  |                |                | $b_v = 0$      | 7.66                  |                |                | 2/0            | v =0.93        |                   |               |
|                  |                |                |                |                       | Left           | s ide          |                |                |                   |               |
| •000             | •532           | •771           | •602           | •271                  | -•158          | +564           | •717           | • 493          | •141              | 201           |
| •025<br>•075     | •317<br>•137   | 125<br>174     | -1.058<br>874  | -1.377<br>-1.243      | -•719<br>-•731 | 4171<br>-4064  | 299<br>284     |                | -1.325<br>-1.329  | 487<br>497    |
| 150              | •014           | 210            | 406            | -1.150                | 734            | 197            | 226            |                | -1.079            | - 557         |
| •250             | 081            | 232            | 407            | -1.090                | 636            | 188            | - 232          | 178            | 741               | 557           |
| • 350            | 166            | ~.260          | 264            | 682                   | 606            |                |                |                |                   |               |
| •450             | 217            | 258            | -•226          | 124                   | 586            |                |                |                |                   |               |
| •550<br>•650     | 198<br>129     | 214<br>121     | 191<br>105     | 064<br>024            | -∙556<br>-•515 | 109            | 076            | 112            | 261               | 411           |
| 750              | 050            | 025            | 021            | •018                  | 463            | 038            | 009            | -•050          | -•255             | 390           |
| ø850             | <b>♦</b> 026   | •043           | •050           | •063                  | 399            | 001            | •041           | 027            | 233               | 362           |
| 900              | +046           | •073           | •084           | •084                  | ~•372          | •018           | •066           | -•015          | -•203             | 346           |
|                  |                |                |                |                       | Right          |                |                |                |                   |               |
| •025<br>•075     | -1.017<br>810  | 058<br>156     | •360           | •572                  | •709           | 997            | 174            | •219           | • <del>•</del> 10 | •528          |
| 150              | -•387          | 160            | •140<br>•040   | •337<br>•205          | ∙505<br>•355   | 955<br>377     | 293<br>230     | -•077<br>-•190 | •098<br>-•088     | •261<br>•069  |
| •250             | 404            | 221            | 068            | 074                   | 213            | • - , ,        | 1              | • • • • •      | •000              | +00/          |
| •350             | 313            | 258            | 152            | 040                   | •080           |                |                |                |                   |               |
| 450              | 225            | -•242          | 197            | 116                   | 016            |                |                |                |                   |               |
| •550             | -4185<br>100   | 194            | 172            | 131                   | 076<br>006     | .055           | 001            | 622            | - 040             | - 007         |
| •650<br>•750     | 100<br>019     | -•109<br>-•025 | 108<br>040     | -•090<br>-•028        | 094<br>102     | •055<br>-•050  | •001<br>-•010  | -•022<br>-•049 | -•049<br>-•051    | 097<br>166    |
| 850              | •079           | ◆077           | •056           | •062                  | 070            | -000<br>•018   | •062           | •029           | •008              | 134           |
| 900              | •110           | •113           | .089           | •090                  | ~•097          | •031           | •083           | •042           | •018              | 152           |
|                  |                |                |                |                       |                |                |                |                |                   |               |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued (j)  $\alpha$  = 0°; M = 0.92

|              | T              |                | C              | for          |                | 0.60          |                  |                       |                 |                |  |  |
|--------------|----------------|----------------|----------------|--------------|----------------|---------------|------------------|-----------------------|-----------------|----------------|--|--|
|              | 4              | 1              | Cp             | for-         | ···            |               |                  | Cp for                |                 |                |  |  |
| X CV         | B = -3.9       | B=0°           | 1'             | B=7.9°       | B=12.7°        | B=-3.9°       | B =0°            | B=3.9°                | B=7.9°          | B=12.70        |  |  |
| C√           | L              | Z/             | bv = 0.        | //           |                |               | 2/               | by = 03               | 38              |                |  |  |
|              |                |                |                |              | Left s         | ide           | <u>-</u> -       |                       | <del></del>     |                |  |  |
| •000         | •781           | +698           | •658           | .446         | •072           | •613          | .802             | •681                  | •366            | 142            |  |  |
| +025         | •286           | 036            | 440            |              | -1.092         | •317          | 067              |                       | -1.253          | 726            |  |  |
| +075<br>+150 | •152<br>•034   | 079<br>149     | 375<br>367     | 754<br>645   | 950<br>815     | *140          | 136              |                       | -1 • 136        | -•731          |  |  |
| 250          | 009            | 114            | 257            | 549          | 648            | -040          | 159<br>181       | 414<br>324            | -1+036<br>-+674 | -•742<br>-•730 |  |  |
| .350         | 053            | 146            | 224            | 373          | 558            | 119           | 229              | 345                   | 520             | 684            |  |  |
| •450         | 129            | 185            | 223            | 311          | 514            | 201           | 268              | 332                   | 420             | 619            |  |  |
| •550         | 134            | 156            | 141            | -•175        | 441            | 197           | 213              | 159                   | 120             | 545            |  |  |
| •650<br>•750 | 106<br>053     | 095<br>020     | 064<br>.012    | 077<br>005   | 354<br>249     | 142           | 140              | 082                   | 032             | - 477          |  |  |
| 850          | 023            | -020<br>-061   | <b>.</b> 080   | •059         | 151            | -•051<br>•035 | 020<br>.065      | -:006<br>•075         | •030<br>•097    | 405<br>325     |  |  |
| ♦900         | •060           | •097           | .109           | •093         | 095            | 082           | •110             | •117                  | 125             | ~ 273          |  |  |
|              | <u> </u>       |                |                | <del></del>  | Right          | side          |                  |                       |                 |                |  |  |
| • 025        | -+324          | •036           | .343           | •612         | .835           | 876           | 035              | •351                  | •582            | •747           |  |  |
| •075<br>•150 | 410            | 084            | •149           | •364         | • 566          | 645           | 123              | .149                  | .353            | •532           |  |  |
| •250         | -•379<br>-•271 | -•132<br>-•119 | •054<br>•011   | •224<br>•147 | •396<br>•282   | 427<br>321    | 149<br>172       | •054                  | •214            | •375           |  |  |
| 350          | 241            | 149            | 054            | •054         | •168           | 338           | 211              | 026<br>098            | •104<br>•014    | •249<br>•139   |  |  |
| +450         | 226            | 183            | 122            | 037          | •059           | 250           | 215              | 153                   | 077             | •017           |  |  |
| • 550        | 136            | 149            | 124            | 058          | •017           | 163           | 200              | 183                   | 116             | - 036          |  |  |
| •650         | 055            | 078            | 087            | 051          | 019            | 080           | 109              | 119                   | 096             | 068            |  |  |
| •750<br>•850 | •014           | 012<br>.074    | 034            | 026          | 037            | •008          | 007              | 024                   | 019             | 058            |  |  |
| 900          | 109            | •102           | •049<br>•074   | .053<br>.074 | 004<br>015     | 4092<br>4120  | •087<br>•114     | ∎068<br>∎095          | •064<br>•083    | 037<br>062     |  |  |
|              |                |                | by = 0         |              |                | 4110          |                  | =0.93                 | •003            | -1002          |  |  |
|              |                |                |                |              | Left           | s ide         |                  |                       |                 |                |  |  |
| •000         | 0542           | •772           | •620           | •302         | 117            | •571          | •724             | •518                  | . 100           | 174            |  |  |
| •025         | .321           |                | -1.014         | -1.325       | 737            | •170          | 275              |                       | •183<br>•1•282  |                |  |  |
| •075         | •140           | 165            | 864            | -1.200       | ~.751          | 063           | 298              |                       | -1 • 282        | 509            |  |  |
| a150         | •018           | -•205          | 602            | -1.112       | 728            | 218           | 247              |                       | -1.064          | 562            |  |  |
| • 250        | 081            | -•233          | 390            | -1.071       | 699            | 244           | -•242            | -•185                 | 917             | -1566          |  |  |
| •350<br>•450 | 177<br>247     | -•295<br>-•273 | -•413<br>-•172 | 962<br>358   | 611<br>583     |               |                  |                       |                 | 1              |  |  |
| 550          | -4209          | 219            | 167            | 043          | 558            |               |                  |                       |                 | - 1            |  |  |
| •650         | 131            | 106            | 094            | •006         | 526            | 092           | 065              | 111                   | 311             | 427            |  |  |
| •750         | -+042          | 016            | 020            | .044         | 473            | 034           | 001              | 051                   | -4274           | 400            |  |  |
| •850<br>•900 | +033           | •058           | •061           | ±078         | 413            | •006          | • 053            | 023                   | -+244           | 370            |  |  |
| 1,400        | •055           | •087           | •091           | •098         | 7+391<br>Bioht | •026          | •078             | 011                   | 219             | 361            |  |  |
| .025         | 995            | 053            | 4361           | a 568        | Right          | <i>side</i>   |                  | . 224                 |                 |                |  |  |
| 1075         | 826            | 146            | 139            | 339          | 503            | 960           | ·• 167<br>·• 316 | •220<br><b>-•0</b> 79 | •411<br>•101    | •536<br>•261   |  |  |
| <b>•150</b>  | 510            | 158            | •041           | .202         | •352           | 675           | 251              | 215                   | -+095           | .067           |  |  |
| •250         | 397            | 222            | 071            | •067         | •208           |               |                  |                       |                 |                |  |  |
| +350<br>+450 | -:421<br>-:181 | -•293<br>-•251 | 170            | 048          | •080           |               |                  |                       |                 | ļ              |  |  |
| 4550         | 164            | -•251<br>-•189 | 231<br>185     | 138<br>170   | 025<br>092     |               |                  |                       |                 | 1              |  |  |
| 650          | 087            | 096            | 111            | 113          | 112            | 083           | 1.058            | 049                   | 086             | 150            |  |  |
| <b>♦750</b>  | 011            | 014            | 032            | 037          | 121            |               | ** 004           |                       |                 | 181            |  |  |
| •850         | •086           | •089           | •070           | .063         | 075            | .018          | .076             | .038                  | .014            | - • 146        |  |  |
| •900         | •120           | •123           | •104           | •091         | 106            | •030          | •093             | •057                  | •017            | 164            |  |  |

(k)  $\alpha = 9.4^{\circ}$ ; M = 0.60

|   |                |                | $C_{P}$       | for-           |                       |                |                | Cp for                | _              | <del></del>      |
|---|----------------|----------------|---------------|----------------|-----------------------|----------------|----------------|-----------------------|----------------|------------------|
| x C <sub>v</sub>                        | B=-3.9         | 17             | 1′            | B=7.9°         | B=12.7°               | B=-3.9°        | B=0°           | B=39°                 | B=7.9°         | B=12.79          |
| C <sub>V</sub>                          |                | 2/             | by = 0.1      | //             |                       |                | Z/             | by = 0.               | 38             | -11              |
|   |                |                |               |                | Left s                | ide            |                |                       |                |                  |
| •000                                    | •404           | .804           | •439          | 646            | -1.194                | •162           | .693           | •174                  | 716            | -1.505           |
| ●025<br>●075                            | 031<br>.015    | ~•132<br>-•136 | 231<br>316    | - 6734         | -2+578<br>-+893       | •333           | 109            | 701                   | -1.213         | -1.315           |
| •150                                    | 019            | -•164          | 314           | 535<br>444     | 664                   | ●149<br>●054   | 141<br>143     | -•463<br>-•341        | -1.045<br>793  | -1.265<br>-1.333 |
| 250                                     | -019           | 109            | 225           | 319            | 427                   | 012            | 155            | 282                   | 439            | -1.176           |
| •350                                    | -4044          | 116            | 206           | 265            | 359                   | 065            | 166            | 259                   | 317            | 806              |
| <b>♦450</b>                             | -•065          | 132            | 195           | <b>-</b> .231  | 345                   | 095            | 180            | 234                   | 274            | 457              |
| •550                                    | 067            | 116            | 158           | 190            | 258                   | 093            | 141            | 179                   | 213            | 308              |
| •650                                    | 044            | <b></b> 079    | 117           | ~.149          | 180                   | 070            | 104            | 126                   | 154            | - • 240          |
| •750<br>•850                            | 015<br>.015    | 038<br>.011    | 062<br>.002   | 074<br>013     | 114<br>037            | 035<br>.020    | -•063<br>•008  | 062<br>.013           | 086<br>009     | 164<br>078       |
| 900                                     | .041           | •045           | •039          | •016           | •007                  | •045           | •045           | •045                  | •025           | 034              |
| • |                |                |               |                |                       | side           |                |                       |                |                  |
| •025                                    | 178            | 044            | •000          | .504           | •806                  | 684            | 063            | •373                  | •583           | •715             |
| •025<br>•075                            | 327            | 136            | .013          | •504<br>•320   | •543                  | 451            | 116            | .162                  | .363           | 536              |
| •150                                    | 309            | 146            | 016           | •214           | •383                  | 343            | 129            | .064                  | .227           | •383             |
| •250                                    | 238            | 102            | 028           | •150           | •281                  | -•281          | 141            | •004                  | .134           | •267             |
| •350                                    | 221            | 118            | 048           | •073           | •180                  | - • 256        | 157            | 046                   | •062           | •178             |
| • 450<br>• 550                          | -•203<br>-•159 | 132<br>107     | 074<br>060    | •019<br>•005   | •107<br>• <b>0</b> 73 | 231<br>194     | -•157<br>-•136 | -•078<br>-•080        | •003<br>-•020  | •100<br>•059     |
| •650                                    | 109            | 072            | 037           | •010           | •062                  | 125            | 093            | 051                   | ~.013          | <b>.</b> 039     |
| •750                                    | 056            | 024            | 005           | •019           | •057                  | 054            | 031            | 014                   | •016           | 048              |
| .850                                    | •011           | •041           | .039          | .062           | .087                  | •025           | •038           | .050                  | •057           | •078             |
| •900                                    | •045           | •061           | •064          | •071           | •082                  | .054           | .050           | •055                  | .053           | •055             |
|   |                | Z/             | $b_V = O$ .   | 66             |                       |                | Z/by           | =0.93                 |                |                  |
|   |                |                |               |                | Left                  | s ide          |                |                       |                |                  |
| •000                                    | •041           | •643           | •034          | 841            | -1.110                | •168           | •585           | 039                   | 485            | 811              |
| ●025                                    | •337           | 139            | 977           | -1.369         | 897                   | •199           | 226            | 872                   | 730            | 594              |
| •075                                    | e156           | 159            | 517           | -1.340         | 884                   | •006           | 187            | 453                   | <b></b> 711    | 587              |
| •150                                    | •043           | 164            | 387           | -1.176         | ~•849                 | 088            | 173            | 286                   | 673            | 594              |
| •250<br>•350                            | -•026<br>-•074 | 164<br>173     | 300<br>261    | -:639<br>-:315 | 813<br>781            | 079            | 104            | -•197                 | 573            | 578              |
| 450                                     | 113            | 178            | ~.227         | 242            | -•738                 |                |                |                       |                |                  |
| •550                                    | -6125          | 164            | 190           | - 210          | 664                   |                |                |                       |                |                  |
| •650                                    | 090            | 109            | 131           | 151            | 575                   | 111            | 072            | 122                   | 340            | 461              |
| <b>●750</b>                             | 044            | 051            | 064           | 086            | 480                   | 072            | 024            | 087                   | 297            | - 1434           |
| <b>●850</b>                             | 003            | 003            | 007           | 036            | 379                   | 035            | •013           | 058                   | 253            | 416              |
| •900                                    | •015           | •025           | •018          | 011            | 336                   | 019            | •027           | 037                   | 231            | 395              |
|   |                |                |               |                | Right                 |                |                |                       |                |                  |
| •025<br>•075                            | 881<br>502     | 065<br>129     | •380<br>•162  | •570<br>•361   | +644<br>+495          | 718<br>417     | 127<br>178     | •249<br>•007          | •375<br>•112   | •450<br>•237     |
| 150                                     | 350            | 132            | •064          | •220           | •356                  | 270            | 152            | 074                   | 015            | •087             |
| •250                                    | 300            | 157            | 016           | •103           | .228                  |                | V-#*           |                       |                |                  |
| •350                                    | 272            | 173            | 071           | .023           | •135                  |                |                |                       |                |                  |
| 4450                                    | 231            | 166            | 099           | 020            | •062                  |                |                |                       |                |                  |
| •550                                    | 189            | 141            | 096           | 045            | •020                  |                |                | *                     |                |                  |
| <b>♦650</b>                             | 125            | 107            | 071           | 036            | •000                  | -•097          | 063            | <b>085</b>            | 115            | 130              |
| ●750<br>●850                            | 061<br>.015    | 031<br>.031    | -•030<br>•032 | 024<br>.030    | -•012<br>•000         | 074<br>026     | 024<br>.025    | 071<br>009            | -•106<br>-•070 | 151<br>149       |
| 900                                     | a015           | •054           | .055          | •044           | 021                   | -•026<br>-•003 | .048           | <b>-</b> 8009<br>4004 | -+056          | 171              |
| L 775                                   |                |                |               |                |                       | 1000           |                | <del></del>           |                |                  |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(1)  $\alpha = 9.6^{\circ}$ ; M = 0.80

|                   |                |                | Cp            | for-           |               |              | (            | Cp for       | _               |                 |
|-------------------|----------------|----------------|---------------|----------------|---------------|--------------|--------------|--------------|-----------------|-----------------|
| <b>.</b> .        | B=-3.9         | B=0°           | B=39          | B=7.9°         | B=12.70       | B=-3.9°      | B=0°         | B=3.9°       | B=7.9°          | B=12.7°         |
| $\frac{x}{C_{v}}$ | <u> </u>       | Z              | by = 0.1      | //             | <u></u>       | <u></u>      | Z/           | by = 0.      | <del>38</del>   | -17             |
| *                 |                |                |               | <u> </u>       | Left s        | ide          |              |              |                 |                 |
| .000              | •356           | .848           | •422          | 349            | 188           | •404         | •723         | .434         | 137             | 801             |
| •025              | -•043          | 119            | 153           | ~.597          | -1.595        | •328         |              | -1.046       | -1.517          | -1.046          |
| •075              | •020           | -•134<br>-•176 | 325<br>363    | 569<br>537     | -1.058<br>705 | •151<br>•057 | 149<br>148   | 499<br>381   | -1:094<br>-:770 | -1:028<br>-:985 |
| •150<br>•250      | -•016<br>-•022 | 121            | 256           | 374            | 485           | 015          | 163          | 317          | 490             | - 930           |
| 350               | 056            | 130            | 232           | 307            | 404           | 081          | 198          | 299          | 393             | 797             |
| 450               | 081            | 154            | 224           | 272            | 360           | 127          | 213          | 270          | 327             | 631             |
| •550              | 081            | 134            | 182           | 219            | 307           | 115          | 167          | -•201        | 244             | -•497<br>-•397  |
| •650<br>•750      | 059<br>024     | 095<br>045     | 130<br>063    | -:169<br>-:090 | 233<br>163    | 091<br>043   | 121<br>056   | 140<br>063   | 169<br>082      | 297             |
| 850               | 019            | •020           | -0003<br>-006 | 009            | 084           | 025          | •024         | .023         | 001             | 183             |
| 900               | •051           | •057           | .045          | .027           | 038           | .060         | .066         | .064         | .043            | 119             |
|                   |                |                |               |                | Right         | side         |              |              |                 |                 |
| •025              | 095            | 018            | 025           | •390           | •768          | -1.077       | 048          | •375         | •589            | .715            |
| • 075             | 333            | 131            | .024          | •312           | •521          | 468          | 116          | •169         | •370            | •532            |
| •150<br>•250      | 352<br>262     | 149<br>110     | •003<br>-•020 | .218<br>.154   | .375<br>.274  | 367          | 136<br>148   | •064<br>•003 | •237<br>•137    | •393<br>•271    |
| 350               | 241            | 130            | 052           | •079           | •172          | 276          | 169          | 055          | •059            | •180            |
| 450               | - 229          | 151            | 083           | 005            | •091          | 250          | 184          | 101          | 009             | •086            |
| ●550              | 175            | 125            | 072           | 015            | • 056         | 198          | 161          | 112          | 044             | .038            |
| •650              | 116            | 080            | 044           | 008            | •044          | 125          | 109          | 073          | 029             | •021            |
| •750              | 059            | 035            | 012           | •002           | •036          | 040          | 035          | 022          | •002            | •026            |
| •850<br>•900      | ●023<br>●058   | •041<br>•068   | •045<br>•067  | ●050<br>●064   | ∙064<br>•058  | •045<br>•073 | •047<br>•066 | •045<br>•061 | ∙053<br>•059    | •045<br>•021    |
| .,,,,             | •058           |                | /bv = 0       |                | •050          | 1            |              | v = 0.93     |                 | 1022            |
|                   |                |                |               |                | Left          | side         |              | <u> </u>     |                 |                 |
| •000              | ●284           | •668           | •295          | 272            | 711           | 321          | •600         | •178         | 256             | 622             |
| 025               | •336           | 140            | -1.197        | -1.250         | 711           | 204          | 259          | 895          | 685             | 541             |
| •075              | •155           | 164            | 650           | -1.173         | 714           | 015          | 232          | 680          | 664             | 523             |
| 150               | +043           | 182            | 439           | -1.043         | 700           | 122          | 191          | 354          | 671             | 523             |
| a250              | 036            | 188            | 325           | 871            | 671           | 086          | -•115        | 237          | 600             | 535             |
| +350<br>+450      | 095            | -•204<br>-•207 | 285<br>250    | 619<br>387     | 650<br>627    |              |              |              |                 |                 |
| •550              | 144            | 179            | 203           | <b></b> 248    | 590           | 1            |              |              |                 |                 |
| •650              | 103            | 118            | 131           | 149            | 552           | 106          | 069          | 115          | 358             | 445             |
| ♦750              | 043            | 044            | 054           | 062            | 500           | 053          | 012          | 072          | 310             | 422             |
| •850              | •010           | •018           | •012          | •000           | 445           | 010          | •033         | 037          | 265             | 392             |
| •900              | •037           | •047           | •042          | •029           | Piah:         | •004<br>side | •053         | 017          | 233             | 381             |
| 005               | -1 102         | 059            | •379          | •574           | •666          | 943          | 134          | •256         | •406            | •483            |
| •025<br>•075      | -1.103<br>572  | 134            | .166          | •364           | •503          | 578          | - 214        | 022          | 134             | 263             |
| •150              | 383            | 142            | •071          | •231           | • 366         | 277          | 167          | 096          | 015             | •105            |
| • 250             | 323            | 170            | 022           | •111           | •238          |              |              |              |                 |                 |
| • 350             | -•283          | 195            | 086           | •023           | •132          | i            |              |              |                 |                 |
| 450               | 241            | 190            | 116<br>125    | -•037          | •052          |              |              |              |                 |                 |
| a550              | 189<br>121     | 164<br>109     | 125<br>086    | -•062<br>-•050 | 003<br>026    | 089          | 054          | 081          | 113             | 154             |
| 1750              | -4045          | 039            | 031           | 023            | 043           | 059          | 015          | 052          | 096             | 169             |
| 850               | +043           | •048           | .045          | •037           | 032           | 001          | 051          | .012         | 049             | 159             |
| ■900              | •076           | •077           | •070          | •055           | 064           | •022         | •069         | •030         | 050             | 180             |

(m)  $\alpha = 9.7^{\circ}$ ; M = 0.85

|                           |                |               | $C_{p}$         | for-         |                |              |              | Cp for         | _              |                  |
|---------------------------|----------------|---------------|-----------------|--------------|----------------|--------------|--------------|----------------|----------------|------------------|
| <u>_x_</u>                | B=-3.9         | B=0°          |                 | 1º B=7.9     | · B=12.7°      | B=-3.9       | B =0°        | B=3.9°         | B=7.9°         | B=127            |
| <del>x</del> <del>C</del> |                | Z,            | 16v = 0         | .//          |                |              | Z            | 1by = 0.       | 38             |                  |
|                           |                |               |                 |              | Left s         | ide          |              |                |                |                  |
| •000                      | •336           | •866          | •415            | 203          | 029            | •470         | •740         | -1.153 ·       | .018<br>-1.579 | 622              |
| •025<br>•075              | 065            | 108<br>129    | 103<br>314      | 519<br>539   | -1.411<br>996  | •325<br>•146 | 100<br>149   |                |                | -1.016<br>-1.032 |
| 150                       | -020           | 177           | 397             | 583          | 736            | 057          | 158          | 392            | 666            | 972              |
| .250                      | 031            | 117           | 273             | 411          | 508            | 017          | 172          | 335            | 439            | 884              |
| •350                      | -•066          | 134           | 247             | 318<br>271   | 433<br>386     | 088<br>142   | 209<br>228   | 317<br>288     | 382<br>350     | 767<br>643       |
| •450<br>•550              | -±091<br>-±091 | 165<br>148    | -,247<br>-,199  | 224          | ~•338          | 130          | 189          | 214            | 261            | 545              |
| 4650                      | 068            | 103           | 133             | 167          | 266            | 103          | 128          | 140            | 174            | 458              |
| .750                      | 037            | 050           | 070             | 093          | 200            | 054          | 059          | 062            | 085            | 365              |
| 850                       | •019           | •023          | .005            | 004          | 117            | •020         | •029         | •022           | •009           | - • 245          |
| •90 <b>0</b>              | +051           | •066          | •046            | •041         | Right          | 5/de         | •073         | •071           | .051           | 177              |
| •025                      | -4049          | 015           | 051             | .327         | •728           | -1.044       | 049          | •361           | .586           | <b>▲719</b>      |
| 075                       | 326            | ~ 131         | 012             | •327<br>•294 | .488           | 462          | 122          | •155           | .370           | .532             |
| •150                      | 370            | 162           | 008             | •220         | ±347           | 373          | 138          | •062           | •242           | • 388            |
| 250                       | 276            | 111           | 038             | .165         | • 256          | 315<br>292   | 158          | 013<br>073     | •142<br>•065   | •268<br>•169     |
| .350<br>.450              | 255            | 136<br>166    | 068<br>103      | •081<br>•009 | •163<br>•079   | 265          | 182<br>197   | 116            | 012            | .076             |
| •550                      | 187            | ~.136         | 088             | 015          | •044           | 206          | 179          | 129            | 052            | .025             |
| .650                      | 120            | 088           | 059             | 009          | •029           | 133          | 115          | 093            | 041            | • 000            |
| •750                      | -:064          | 042           | 029             | •002         | .018           | 040          | 036          | 033            | 005            | •000             |
| ·850                      | •024           | •039          | •041            | •051<br>•071 | •041<br>•032   | •048         | •053<br>•076 | •042<br>•061   | •055<br>•062   | •018<br>-•012    |
| •900                      | ■063           | <u>.070</u> Z | 058<br>1 by = 0 |              | •032           | •001         |              | v = 0.93       | •002           |                  |
|                           | }              |               |                 |              | Left           | s ide        |              | V 0.55         |                |                  |
| •000                      | •342           | •680          | •365            | 135          | -4619          | •351         | •609         | •207           | 240            | 613              |
| .025                      | 331            | 132           | -1.253          | -1.365       | 702            | •197         | 258          | -1.163         | 764            | 545              |
| • 075                     | ø152           | 168           | 659             | -1.257       | 703            | 031          | 265          | 721            | 731            | 528              |
| •150                      | 4036           | 189           | 466             | -1.016       | 692            | 150<br>102   | 207<br>118   | ~.428<br>240   | 749<br>666     | 532<br>545       |
| • 250<br>• 350            | 049<br>113     | 200<br>220    | 355<br>296      | 794<br>613   | ~•673<br>-•650 | 102          | 110          | 240            | -1000          | - 6 2 4 2        |
| 450                       | 154            | 223           | 264             | 412          | 631            |              |              |                |                |                  |
| .550                      | 170            | 194           | 213             | 264          | <b>~</b> ∗598  | i            |              |                |                |                  |
| .650                      | 119            | 121           | 136             | 146          | - 4 5 6 4      | 110          | 073          | 125            | 347            | - +474           |
| • 750                     | -+04B          | 043           | 060             | 055          | 518            | 054          | 011<br>.039  | -•076<br>-•039 | 290<br>237     | 441<br>413       |
| •850<br>•900              | •007<br>•040   | •022<br>•054  | .014<br>.046    | •009<br>•045 | 463<br>439     | .010         | •062         | 023            | 206            | - 400            |
| •,0•                      | 1000           |               | 70,10           | •••          | Right          |              |              |                |                |                  |
| •025                      | -1.235         | -4059         | •367            | •571         | •671           | -1.152       | 145          | •242           | .411           | • 493            |
| •075                      | 533            | 138           | .155            | . 364        | 4509           | 713          | 252          | 058            | •132           | • 268            |
| •150<br>•250              | -•398<br>-•342 | 149<br>185    | •062<br>-•036   | •236<br>•118 | •372<br>•240   | 289          | 177          | 130            | 032            | .106             |
| • 250<br>• 350            | 302            | 214           | 102             | •022         | •129           |              |              |                |                |                  |
| 450                       | 254            | 209           | 147             | 052          | .035           |              |              |                |                |                  |
| .550                      | 198            | 180           | 145             | 079          | 023            |              |              |                |                |                  |
| 4650                      | -+122          | 111           | 106             | 062          | 049            | 092          | 054<br>012   | 098<br>066     | 117<br>098     | 182<br>195       |
| •750<br>•850              | 042            | -•037<br>•056 | 049<br>.039     | 028<br>.045  | 069<br>054     | 059<br>.010  | •059         | •011           | 045            | 182              |
|                           | 1 507/         |               | # V J 7         |              | • V J ¬        | 1 50.00      | .079         |                |                | 205              |

(n)  $\alpha = 9.7^{\circ}$ ; M = 0.90

|                |                |                | Cp                         | for-           |                | T              |                | Cp for           |                              |              |
|----------------|----------------|----------------|----------------------------|----------------|----------------|----------------|----------------|------------------|------------------------------|--------------|
| x              | B=-3.9         | B=0°           |                            | · B=7.9°       | B=12.70        | B=-3.9°        | B=0°           | B=39°            | B=7.9°                       | B=12.7°      |
| X   C          |                | Z              | by = 0.                    | //             | <u></u>        | <del></del>    | Z              | by = 0.3         | 17                           | ٠٠           |
|                |                |                |                            |                | Left s         | ide            |                | -, 0.0           |                              |              |
| •000<br>•025   | •300<br>-•092  | •911           | •414                       | 105            | •098<br>-1•267 | •531<br>•324   | •752           | •572             | e157                         | 465          |
| •075           | •017           | 081<br>109     | 019<br>248                 | -•446<br>-•485 | -1.267<br>927  | •150           | □•088<br>□•142 |                  | -1.403                       | 944          |
| e150           | 013            | 167            | 415                        | 583            | 700            | 054            | 155            | -+473            | -1.266<br>752                | 955<br>897   |
| e 250          | 026            | 114            | 297                        | 517            | 571            | 021            | ··· 178        | 341              | 660                          | - 326        |
| •350           | -•066          | 141            | 265                        | 421            | 488            | 092            | ~.224          | 361              | 504                          | 755          |
| • 450<br>• 550 | 098            | 179<br>173     | 274                        | 337            | 437            | 162            | •268           | 345              | 286                          | 654          |
| 650            | 089            | 173            | 221<br>142                 | -•236<br>-•171 | -•382<br>-•313 | 157<br>126     | 215            | 208              | 266                          | 566          |
| 750            | 049            | 056            | 068                        | 109            | 238            | 065            | ··•143         | 136<br>054       | <b>~.</b> 208<br><b>1</b> 05 | 496<br>416   |
| .850           | •007           | •022           | •009                       | 022            | 149            | 021            | •029           | 034              | 002                          | 410          |
| •900           | +051           | •063           | .051                       | .027           | 096            | •066           | •075           | •081             | 046                          | 235          |
|                |                |                |                            |                | Right          | side           |                |                  |                              |              |
| •025           | •038           | •016           | 056                        | • 306          | •728           | 941            | • • 039        | •377             | .588                         | •725         |
| •075<br>•150   | 276<br>411     | 114<br>149     | •033<br>•019               | 298            | • 496          | 568            | 114            | •171             | .368                         | •536         |
| 250            | 292            | -•109          | 009                        | •229<br>•165   | ∙358<br>•268   | -•420<br>-•329 | 138<br>158     | •070             | •240                         | ■394         |
| •350           | 283            | 139            | 056                        | •075           | •167           | 341            | 203            | ~•002<br>~•069   | •133<br>•047                 | •269<br>•171 |
| a 450          | -6277          | 184            | 092                        | 008            | •076           | 305            | 230            | 133              | 040                          | 990          |
| •550           | 208            | 158            | 092                        | 035            | •030           | 214            | 204            | 152              | 079                          | •005         |
| •650           | 129            | 101            | 072                        | <b>~•0</b> 37  | .010           | 132            | 143            | 114              | 073                          | 019          |
| •750           | 062            | 053            | 037                        | 026            | 004            | 038            | - • 040        | 042              | 029                          | 022          |
| •850<br>•900   | •026<br>•062   | •037           | •034                       | •035           | •014           | •055           | •053           | •042             | .035                         | 008          |
| 1,00           | 1002           | •066<br>Z/     | $\frac{.057}{b_{\nu} = 0}$ | 66             | •006           | •085           | - <u>*072</u>  | v = 0.93         | •044                         | 030          |
|                |                |                |                            |                | Left           | s ide          |                | y - 0.93         |                              |              |
| •000           | •404           | 404            | 4.24                       |                |                | r              |                |                  |                              |              |
| 025            | •328           | •684<br>-•129  | •436<br>-1•169             | •018<br>-1•424 | 512<br>668     | .390<br>.183   | •616<br>••256  | •278             | 129                          | 553          |
| 075            | 150            | 169            | 986                        | -1.313         | -673           | 053            | 314            | -1.162<br>-1.074 | 768<br>782                   | 528<br>514   |
| •150           | <b>●</b> 029   | 204            | 456                        | -1.163         | 677            | - 246          | 233            | 620              |                              | 516          |
| • 250          | 060            | 226            | 415                        | 770            | 664            | 134            | 125            | 194              | 758                          | -4528        |
| •350           | 138            | 265            | 393                        | 612            | 644            |                |                |                  |                              | 1            |
| • 450<br>• 550 | -•200<br>-•197 | -•263<br>-•218 | 229                        | -•509          | 620            |                |                |                  |                              |              |
| •650           | 134            | -•218<br>-•128 | 206<br>130                 | 397<br>243     | 589<br>559     | 118            | ~ . 0.74       | -122             | - 200                        | 1            |
| •750           | 057            | 047            | 046                        | 113            | 523            | 054            | -•076<br>-•008 | -•122<br>-•074   | 399<br>337                   | 475<br>453   |
| ∙850           | •010           | •023           | .022                       | 016            | 475            | ~•006          | •043           | 033              | 281                          | 425          |
| •900           | •041           | <b>♦058</b>    | •055                       | •026           | 448            | •014           | •059           | 011              | 251                          | 409          |
|                |                |                |                            |                | Right          |                |                |                  |                              |              |
| •025<br>•075   | -1.120<br>901  | 051            | •370                       | • 562          | +674           | -1.150         | 141            | .246             | •403                         | •502         |
| 150            | 364            | 141<br>151     | •163<br>•066               | •353<br>•226   | •509           | -1.036         | 318            | 061              | •119                         | • 280        |
| 250            | 409            | 208            | 041                        | •226           | •374<br>•241   | ~•372          | -•206          | -•202            | 065                          | 108          |
| • 350          | 356            | 243            | 125                        | 005            | •123           |                |                |                  |                              | ĺ            |
| •450           | -+238          | 253            | 186                        | 091            | •026           |                |                |                  |                              |              |
| ♦550           | 201            | 207            | 174                        | 131            | 042            |                |                |                  |                              | - 1          |
| •650           | 121            | 129            | 122                        | 109            | -•073          | 098            | 061            | 100              | 159                          | 199          |
| €750<br>•750   | 044            | 041            | 053                        | 060            | 087            | 061            | 016            |                  | 125                          | 213          |
| 4850<br>4900   | ◆054<br>◆090   | .057<br>.084   | •041<br>•070               | •019           | 073            | •006           | •061           |                  | 068                          | 193          |
| .,,,,,         | •090           | 1004           | •070                       | •040           | 102            | •026           | <b>∗</b> 078   | •030             | 064                          | 208          |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(o)  $\alpha = 9.8^{\circ}$ ; **M** = 0.92

|                            |                |                | Cp         | for-              |         |   |                         | Cp for           | _              |        |
|----------------------------|----------------|----------------|------------|-------------------|---------|---|-------------------------|------------------|----------------|--------|
| х                          | B=-3.9         | B=0°           | B=3.9      | B=79°             | B=12.70 | B=-3.9°                                 | 1                       | B=3.9°           | 17             | B=12.7 |
| <u>x</u><br>C <sub>v</sub> |                | Z              | by = 0.    | 11                | <u></u> |   | Z/                      | by = 0.          | 38             |        |
| V                          |                |                |            | · <u>·</u>        | Left s  | ide                                     |                         |                  |                |        |
| • 000                      | •313           | •968           | •449       | 173               |         | •560                                    | e749                    | •591             | •190<br>-1•331 |        |
| 025                        | 059            | 034            | •04B       | 363               |         | •329<br>•161                            | -•038<br>-•097          |                  | -1.189         |        |
| 075                        | •044           | 063            | 164        | 408<br>519        |         | .062                                    | 119                     | 375              | 687            |        |
| 150                        | •027<br>•002   | 119<br>085     | 328<br>240 | -484              |         | 015                                     | 153                     | 323              | 630            |        |
| • 250<br>• 350             | 044            | 119            | 237        | - 423             |         | 094                                     | 200                     | 349              | 547            |        |
| 450                        | 088            | 170            | 265        | 362               |         | 161                                     | 251                     | 385              | 306            |        |
| • 550                      | 103            | 175            | 222        | 253               |         | 169                                     | 217                     | 211              | 270            |        |
| 650                        | 090            | 127            | 138        | 176               |         | 133                                     | 152                     | 135<br>057       | 218<br>112     |        |
| •750                       | 049            | 063            | 070        | 106               |         | 069                                     | 067<br>.023             | •030             | 007            |        |
| ∙850                       | •010           | •014           | •00B       | 024<br>.020       |         | 058                                     | •074                    | 4076             | •040           |        |
| 900                        | +045           | •056           | •052       |                   | Right   | side                                    |                         |                  |                |        |
|                            | <del></del>    | •058           | •004       | .233              | 1119111 | 855                                     | •000                    | •397             | •593           | -      |
| ●025<br>●075               | •121<br>••185  | 068            | 071        | 300               |         | 458                                     | 081                     | .192             | •379           |        |
| 150                        | 333            | 110            | .063       | •262              |         | -•370                                   | 108                     | •096             | •249           |        |
| 250                        | 253            | 084            | .033       | •183              |         | 310                                     | 135                     | •017             | •137           |        |
| • 350                      | 260            | 124            | 016        | .083              |         | 340                                     | 188<br>225              | 057<br>122       | •047<br>-•042  |        |
| 450                        | 274            | 172            | 070        | 005               |         | 333                                     | 206                     | 148              | 093            |        |
| • 550                      | 212            | 163            | 084<br>067 | 040<br>048        |         | 135                                     | 142                     | 116              | 093            |        |
| •650                       | 132            | 108<br>062     | 037        | 039               |         | 042                                     | 045                     | 043              | 047            |        |
| •750<br>•850               | -•072<br>•023  | •031           | •030       | •022              |         | •048                                    | .047                    | •039             | •022           |        |
| 900                        | •057           | .065           | •056       | •040              |         | •081                                    | •069                    | •056             | .032           |        |
|                            |                | Z,             | 1bv = 0    | .66               |         |   | Z/b                     | v = 0.93         |                |        |
|                            |                |                |            |                   | Left    | side                                    |                         |                  |                |        |
| .000                       | •414           | •686           | •438       | •049              |         | •413                                    | 615                     | •299             | -•085<br>-•777 |        |
| .025                       | •325           | 084            | -1.116     | -1.409            |         | •182                                    | 235<br>288              | -1.136<br>-1.063 | <b></b> 772    |        |
| •075                       | 152            | 131            | 920        | -1.285            |         | 051<br>245                              | -•200<br>-•2 <b>2</b> 2 | 506              | 789            |        |
| •150                       | 036            | -•168<br>-•204 | 408<br>416 | -1.132<br>764     |         | 144                                     | 115                     | 177              | 755            |        |
| •250<br>•350               | 057<br>143     | 258            | 425        | 620               |         | • | •===                    |                  |                |        |
| 450                        | 208            | 269            | 223        | 517               |         | 1                                       |                         |                  |                |        |
| .550                       | 204            | 217            | 197        | 406               |         | ]                                       |                         |                  |                |        |
| •650                       | 139            | 133            | 131        | 258               |         | 123                                     | 078                     | 125<br>072       | 402<br>338     |        |
| .750                       | 066            | 049            | 051        | 124               |         | 056                                     | -•007<br>•041           | 072              | -•279          |        |
| .850                       | •006           | •023           | •019       | 019<br>.024       |         | 012                                     | 062                     | 009              | 250            |        |
| •900                       | •033           | •056           | •052       | • UZ <del>-</del> | Diah    | tside                                   |                         |                  |                |        |
|                            | 1 222          | 030            | •383       | • 558             | RIGII   | 1-1.093                                 | 129                     | •251             | •405           |        |
| ●025<br>●075               | -1.052<br>781  | 114            | 181        | 355               |         | 972                                     | 300                     | 051              | •117           |        |
| 150                        | 365            | 131            | .080       | .227              |         | 349                                     | 189                     | 189              | 063            |        |
| • 250                      | 399            | 191            | 029        | •096              |         | -                                       |                         |                  |                |        |
| .350                       | 413            | 240            | 119        | 010               |         | ŀ                                       |                         |                  |                |        |
| 450                        | 231            | <b>-</b> 4248  | 186        | 099<br>151        |         |   |                         |                  |                |        |
| •550                       | 202            | 208<br>148     | 181<br>118 | 127               |         | 095                                     | 058                     | 100              | 158            |        |
| •650<br>•750               | -•124<br>-•042 | -•148<br>-•030 | 054        | 072               |         | 056                                     | 011                     | 062              | 130            |        |
| •750<br>•850               | •050           | -000           | 040        | 012               |         | •010                                    | •060                    | •016             | 069            |        |
| 900                        | 083            | •086           | •069       | • 035             |         | •029                                    | •078                    | •034             | -4064          |        |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND  $VERTICAL\ TAIL\ - Continue\ d$ 

(p)  $\alpha = 15.6^{\circ}$ ; M = 0.60

|                   |                |                | Cp                 | for-           |                |                |                  | Cp for .        | _              |              |
|-------------------|----------------|----------------|--------------------|----------------|----------------|----------------|------------------|-----------------|----------------|--------------|
| $\frac{x}{C_{v}}$ | B=-3.9         | 1/             | 17                 | B=7.9°         | B=12.7°        | B=-3.9°        | B=0°             | B=3.9°          | B=7.9°         | B=12.70      |
| Cv                |                | 2/             | bv = 0.            | //             | -              |                | Z/               | $b_{\nu} = 0.3$ | 8              |              |
|                   |                |                | •                  |                | Left s         | ide            | <del></del>      |                 |                |              |
| •000              | 316            | •822           | ·197               | •098           | 516            | •271           | •741             | •372            | 419            | 959          |
| •025<br>•075      | 636<br>184     | -•153<br>-•155 | •299<br>•017       | •109<br>-•086  | -•521<br>-•455 | •212<br>•082   | 108<br>151       | 367<br>317      | 717            | -1.045       |
| 150               | 075            | 178            | 142                | 200            | 426            | •041           | ·•153            | -•275           | -•522<br>-•401 | 900<br>718   |
| .250              | 029            | 142            | 148                | 182            | 362            | •005           | 162              | 257             | 342            | 580          |
| • 350             | -•020          | 119            | 167                | 191            | 310            | 027            | 183              | 248             | 305            | 480          |
| •450<br>•550      | -•020<br>-•020 | -•130<br>-•130 | 181<br>158         | 191            | 272            | 057            | -•189            | 229             | 269            | 394          |
| •650              | 004            | 085            | 114                | -:164<br>-:116 | 224<br>163     | -•050<br>-•038 | -•164<br>-•133   | -•185<br>-•142  | 219<br>171     | 319          |
| .750              | •000           | 056            | 077                | 073            | 106            | 018            | 078              | 084             | 114            | 260<br>183   |
| <b>850</b>        | •016           | 013            | 029                | 030            | 056            | •016           | 013              | 019             | 055            | 117          |
| •900              | •039           | •026           | 003                | •000           | 020            | 163            | ~•178            | 153             | 162            | 154          |
|                   |                |                |                    |                | Right          | side           |                  |                 |                |              |
| ●025<br>●075      | -077           | 108<br>185     | 777<br>220         | 291            | 095            | 561            | 106              | •128            | •201           | •211         |
| 150               | 202            | -•167          | -•220<br>-•072     | 084<br>002     | •019<br>•093   | 402<br>327     | 160<br>160       | •045<br>•022    | •128           | •230         |
| • 250             | 191            | 119            | 006                | •041           | •146           | 282            | ~•155            | •017            | •091<br>•091   | •230<br>•241 |
| • 350             | 204            | 128            | •008               | .062           | .162           | 261            | 169              | •006            | •080           | • 223        |
| • 450             | 200            | 140            | •013               | •064           | •157           | 243            | 180              | 012             | .064           | .202         |
| •550              | 168            | -•121          | •015               | •062           | •130           | 197            | 160              | ~•019           | •055           | •173         |
| ∙650<br>•750      | -•118<br>-•077 | -•083<br>-•049 | •017               | •057           | •107           | 143            | 126              | 003             | •059           | <b>148</b>   |
| €750<br>€850      | 009            | •010           | •022<br>•041       | ∙052<br>•057   | .084<br>.071   | 082<br>011     | **•067<br>•005   | .015<br>.045    | •057           | .121         |
| •900              | 012            | •032           | .043               | •057           | •059           | •014           | •019             | •036            | ∙066<br>•059   | •100<br>•078 |
|                   |                | Z/             | b <sub>v</sub> = 0 | .66            |                |                |                  | =0.93           |                |              |
|                   | \              |                |                    |                | Left           | side           |                  |                 |                |              |
| •000              | -+018          | •634           | •077               | 633            | 936            | •100           | •555             | 178             | 640            | 752          |
| •025              | ●378           | <b>-</b> •128  | 976                | -1.303         | 965            | •209           | 216              | 959             | B02            | 612          |
| •075              | •198           | ~•155          | 545                | -1.175         | -+945          | •021           | ··•189           | 476             | <b>-</b> 4768  | 607          |
| •150<br>•250      | +084<br>+014   | -•167<br>-•169 | 395<br>305         | 868            | 909            | -•079          | 164              | -•294           | 686            | 598          |
| •350              | 029            | 180            | -•305<br>-•271     | 496<br>332     | 832<br>702     | 050            | 101              | -+215           | 597            | - 4566       |
| 450               | 07Ó            | 189            | -4243              | 260            | ~•566          |                |                  |                 |                |              |
| .550              | 082            | 173            | 204                | 209            | 446            |                |                  |                 |                |              |
| <b>4650</b>       | 061            | 133            | 146                | 148            | 349            | 091            | 081              | 132             | 317            | 410          |
| a 750             | 029            | 072            | 082                | 091            | 260            | 066            | - •042           | 109             | 262            | 380          |
| 4850<br>4900      | ●007<br>●018   | -•024<br>•003  | 024<br>006         | 041<br>020     | -•194<br>-•158 | 036<br>020     | - • 008<br>• 012 | <b>~</b> 4072   | 209            | 344          |
| • / • •           |                |                |                    |                | Right          |                | _ +012           | 056             | -•173          | 317          |
| •025              | -1.027         | 106            | •393               | •570           | •565           | -•795          | 160              | • 243           | •353           | • 404        |
| •075              | -+588          | 158            | .188               | •353           | .440           | 529            | 198              | .011            | .119           | 220          |
| • 150             | -+384          | 146            | •100               | •235           | •343           | 332            | - •173           | 077             | 025            | .069         |
| •250<br>•350      | -+322<br>-+284 | 164<br>183     | •041<br>••017      | 148            | • 266          | [              |                  |                 |                |              |
| a 450             | -+245          | -•183<br>-•183 | 017                | ●084<br>●050   | •202<br>•162   |                |                  |                 |                |              |
| •550              | 197            | 160            | 045                | •034           | •102           |                |                  |                 |                |              |
| •650              | 145            | 117            | 024                | 032            | •100           | 072            | 063              | 093             | 061            | 058          |
| • 750             | -4084          | 069            | •001               | •039           | .080           | -1109          | 047              | 068             | 077            | 095          |
| <b>850</b>        | 002            | • 005          | •045               | •066           | •064           | 057            | •012             | 010             | 032            | 090          |
| • 900             | •028           | •030           |                    |                |                |                |                  |                 |                |              |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Continued

(q)  $\alpha = 15.8^{\circ}$ ; M = 0.80

|                   |                |                | $C_{P}$                  | for-          |                     |                |                | Cp for.        | -                    |               |
|-------------------|----------------|----------------|--------------------------|---------------|---------------------|----------------|----------------|----------------|----------------------|---------------|
| х                 | B=-3.9         | B=0°           | B=3.9°                   | B=7.9°        | B=12.7°             | B=-3.9°        | B=0°           | B=3.9°         | B=7.9°               | B=12.7        |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1                 | //            |                     | Ī              | Z/             | by = 03        | 8                    |               |
|                   |                |                |                          |               | Left s              | ide            |                |                |                      |               |
| •000              | 029            | •863           | •410                     | •172          | 497                 | •311           | •776           | •360           | 237                  | 611           |
| •025<br>•075      | -•993<br>-•642 | •072<br>-•120  | •343<br>•004             | •061<br>-•123 | 463<br>428          | 044            | 069<br>165     | 342<br>345     | -•592<br>-•493       | 737<br>670    |
| •150              | 314            | 214            | 205                      | 254           | -•415               | 104            | 177            | 317            | 430                  | 588           |
| • 250             | 173            | 159            | 192                      | 220           | 360                 | 094            | 182            | 301            | 390                  | 524           |
| • 350             | 102            | 131            | 203                      | 213           | 308                 | 097            | 205            | 281            | 348                  | 460           |
| • 450             | 069            | 143            | 211                      | -•208         | 261                 | -•091          | 217            | 259            | 302                  | 392           |
| •550              | 048            | 135            | 183<br>119               | 173           | 214                 | -•069<br>-•053 | -•180<br>-•140 | -•211<br>-•159 | 243<br>186           | 325<br>269    |
| ∙650<br>•750      | 029<br>016     | 078<br>050     | 084                      | 116<br>081    | 161<br>111          | 037            | 073            | 093            | 120                  | - 194         |
| •850              | 010            | 005            | 029                      | 025           | 054                 | 006            | 002            | 028            | 058                  | 132           |
| •900              | •004           | .034           | 005                      | •007          | 018                 | 186            | 161            | 134            | 142                  | 136           |
|                   |                |                | •                        |               | Right               | side           | <del>.</del>   |                |                      | ···· <u>·</u> |
| •025              | +354           | 754            | 971                      | 483           | 307                 | 465            | 288            | 054            | •016                 | •040          |
| •075              | 051            | 435            | 653                      | 260           | 185                 | 404            | -•277<br>-•221 | 110<br>090     | 025<br>020           | •082<br>•140  |
| •150<br>•250      | -•246<br>-•237 | 262<br>156     | 314<br>156               | 169<br>090    | <b></b> 074<br>•032 | 363<br>328     | 170            | 063            | -0010<br>-011        | 190           |
| a 350             | 252            | 099            | 075                      | 031           | •096                | 301            | 155            | 044            | •027                 | 204           |
| •450              | 241            | 084            | 032                      | •008          | .131                | 281            | 159            | 047            | .037                 | •201          |
| .550              | 206            | 062            | 011                      | .034          | •129                | 235            | 131            | 029            | •045                 | •183          |
| 650               | 145            | -•029          | .006                     | •051          | •116                | 176            | 084            | 011            | .055                 | •163          |
| •750              | 108            | 010            | •020                     | •054          | •102                | 110            | 031            | •017           | •061                 | •134          |
| •850              | ~•042          | •034           | •045                     | •063<br>•063  | •085<br>•075        | 044            | •036<br>•048   | •045<br>•039   | •078<br>•0 <b>66</b> | •114<br>•088  |
| •900              | 026            | •049<br>Z/     | $\frac{.041}{b_{V} = 0}$ |               | •075                | 022            |                | v = 0.93       |                      |               |
|                   |                |                | <i>Σγ - 0.</i>           |               | Left                | s ide          | -/-            | y - 0.33       |                      |               |
| •000              | •276           | •671           | •425                     | 011           | 478                 | •202           | •577           | •117           | 351                  | 665           |
| •025              | 270            | 112            | -1.093                   | -1.272        | 822                 | •149           | 241            | -1.177         | 783                  | 556           |
| •075              | 105            | 161            | 578                      | -1.142        | 802                 | 035            | 224            | 616            | 752                  | 538           |
| .150              | •016           | 182            | 432                      | 864           | 776                 | 127            | 174            | 302            | 681                  | 527           |
| •250              | 034            | 187            | 330                      | 530           | 719                 | 076            | -•088          | 224            | 593                  | 503           |
| • 350             | ~•072          | -•202          | 282                      | 357           | 633                 |                |                |                |                      |               |
| 450<br>550        | -•102<br>-•107 | 206<br>185     | 256<br>215               | 272<br>208    | 530<br>433          |                |                |                |                      |               |
| •550<br>•650      | 076            | -•128          | 147                      | 139           | 348                 | 099            | 053            | 116            | 317                  | 371           |
| •750              | 041            | 059            | - 072                    | 073           | ~.275               | 072            | 013            | 084            | 255                  | 343           |
| .850              | 009            | 002            | 008                      | 026           | 214                 | 047            | •033           | 052            | 198                  | 308           |
| • 900             | •006           | •030           | •023                     | •001          | -•179               | 025            | •048           | 020            | 163                  | 287           |
|                   |                |                |                          |               | Right               |                |                |                |                      |               |
| ∙025<br>•075      | -1.186<br>598  | 140<br>180     | •335<br>•131             | •540<br>•317  | •628<br>•477        | 934<br>639     | -•170<br>-•218 | •215<br>-•028  | •372<br>•127         | •474<br>•280  |
| •150              | 421            | 147            | •056                     | •214          | •383                | 358            | 170            | 113            | 033                  | .113          |
| 250               | 357            | 158            | •000                     | .133          | •312                |                |                |                |                      |               |
| .350              | ~.319          | 173            | 044                      | •070          | •248                |                |                |                |                      |               |
| 450               | 272            | 162            | 063                      | •045          | •204                |                |                |                |                      |               |
| • 550             | 228            | 138            | 061                      | •037          | •161                | 095            | 043            | 058            | 052                  | 038           |
| ∙650<br>•750      | -+164<br>-+095 | -•088<br>-•037 | 032<br>.003              | ∙046<br>•054  | •134<br>•107        | 118            | 010            | 049            | 054                  | 076           |
| • 850             | 012            | •046           | •053                     | •094<br>•084  | •084                | 054            | •056           | •015           | 004                  | 074           |
| •900              | 1              | •069           | •068                     | •077          | •057                | 1              | 840            | •024           | 004                  | 091           |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, AND VERTICAL TAIL - Concluded

(r)  $\alpha = 15.9^{\circ}$ ; M = 0.85

|                  |                |                | Cp             | for-           |               |                         | (                               | Cp for -       | -              |              |
|------------------|----------------|----------------|----------------|----------------|---------------|-------------------------|---------------------------------|----------------|----------------|--------------|
| X                | B=-3.9         | B=0°           | B=39°          | B=7.9°         | B=12.70       | B=-3.9"                 | B=0°                            | B=3.9°         | B=7.9°         | B=12.7°      |
| X C <sub>v</sub> |                | Z/             | by = 0.1       | 7              |               |                         | Z/                              | by = 0.3       | 8              |              |
|                  |                |                |                |                | Left s        | ide                     |                                 |                |                |              |
| •000             | •392           | .914           | •581           | •204           | 613           | •429                    | •776                            | •400           | 250            | 585          |
| •025             | -1.096         | <b>-</b> ∙065  | .261           | 067            | 582           | •200                    | -•174                           | 483            | 666            | 740          |
| •075             | 538            | 258            | 045            | -4225<br>-4354 | 525<br>497    | •013<br>•059            | -•2 <b>5</b> 2<br>-•2 <b>40</b> | -•454<br>-•403 | 570<br>510     | 682<br>611   |
| •150<br>•250     | -•260<br>-•185 | 322<br>225     | -•291<br>-•266 | -•354<br>-•297 | 434           | -•095                   | -•217                           | 356            | 465            | 551          |
| 350              | -149           | 162            | 245            | - 274          | 366           | 132                     | 232                             | 330            | 409            | - 484        |
| 450              | 121            | 162            | 242            | 253            | 301           | 145                     | 241                             | 291            | 348            | - 417        |
| •550             | 091            | 142            | 205            | 200            | 235           | 114                     | 190                             | 232            | 283            | 352          |
| •650             | 048            | 076            | -4124          | 136            | 174           | 085                     | 143                             | 175            | 215            | 292          |
| •750             | 020            | 045            | 092            | 094            | 123           | 046                     | 078<br>007                      | -•104<br>-•032 | 138<br>067     | 218<br>154   |
| •850<br>•900     | •013<br>•035   | •000<br>•033   | 031<br>.000    | -•031<br>-•003 | 062<br>025    | -008<br>-162            | 162                             | 138            | 141            | 136          |
| 1 .900           | •035           | •022           |                |                | Right         | side                    |                                 |                | • 1 7 1        |              |
| •025             | •269           | 620            | -1.099         | 543            |               | -1.102                  | <b>-</b> ₀285                   | 052            | -4047          | 035          |
| 075              | 172            | 803            | 718            | - 338          | 433<br>302    | 770                     | 323                             | 147            | 101            | 005          |
| •150             | 466            | 335            | 354            | 253            | 175           | 550                     | -•2 <b>76</b>                   | 153            | 095            | •051         |
| •250             | 333            | 241            | 229            | 175            | 057           | 326                     | 224                             | 127            | 061            | •116         |
| • 350            | 260            | 164            | 162            | 105            | •022          | -•297                   | 203                             | <b></b> 107    | 040            | •139         |
| • 450            | -•228          | 129<br>091     | 104<br>059     | -•053<br>-•014 | •075<br>•096  | 265<br>215              | 194<br>156                      | 099<br>073     | -•021<br>-•002 | •153<br>•150 |
| ●550<br>●650     | 177<br>115     | 041            | 021            | •011           | •098          | -148                    | -•102                           | 041            | •021           | •139         |
| •750             | 063            | 014            | •006           | •030           | •088          | 071                     | 040                             | 005            | •040           | •119         |
| 850              | 005            | •031           | •032           | •050           | •076          | •004                    | •030                            | .036           | •062           | •099         |
| 900              | •025           | •047           | .040           | .048           | •064          | ●034                    | •041                            | •033           | .048           | •072         |
|                  |                | Z/             | by = 0.        | 66             | ,             |                         | Z/b                             | -0.93          |                |              |
|                  |                |                |                |                | Left          | s ide                   |                                 |                |                |              |
| •000             | •302           | •665           | •451           | •102           | 316           | •256                    | •576                            | •175           | 293            | 639          |
| •025             | •315           | 153            | -1.209         | -1.375         | 811           | •160                    | 268                             | -1.147         | -,869          | 548          |
| •075             | •134           | 194            | 670            | -1.192         | 794           | 039                     | -•268                           | 696            | 827            | 544          |
| •150             | •020           | 211            | 478            | 875            | 770           | 162<br>082              | -•198<br>-•113                  | -•369<br>-•228 | 737            | 537<br>518   |
| • 250<br>• 350   | 053<br>105     | 213<br>224     | 358<br>300     | 611<br>439     | 724<br>649    | -•082                   |                                 | -1228          | 644            | 518          |
| 450              | 142            | 224            | 272            | <b></b> 315    | 551           |                         |                                 |                |                |              |
| 550              | 141            | 198            | 226            | 236            | 460           | ]                       |                                 |                |                |              |
| •650             | 103            | 139            | 151            | 158            | 374           | 095                     | 057                             | 120            | 331            | -•386        |
| •750             | 045            | 064            | 073            | 087            | 301           | 058                     | 015                             | 080            | 271            | 356          |
| •850             | •003           | •002           | 002            | 029            | <b>-</b> •237 | 019                     | •027                            | 041            | 210            | 320          |
| •900             | •025           | •030           | •027           | 002            | -•211         | •003                    | •053                            | 019            | 175            | 303          |
|                  |                |                |                |                | Right         |                         |                                 |                |                |              |
| •025             | -1.369         | -•162          | • <b>29</b> 2  | •513           | •643          | -1 • 2 2 7<br>- • 7 4 2 | -•200                           | •187<br>- •072 | •361           | ∙486<br>•283 |
| •075<br>•150     | -1.059<br>396  | -•214<br>-•187 | •088<br>•015   | •284<br>•182   | •466<br>•372  | 409                     | 264<br>196                      | 073<br>161     | •105<br>-•073  | 106          |
| 250              | 323            | 197            | 046            | •098           | •287          |                         | -0170                           | •101           | •0.5           | •100         |
| •350             | 294            | -•20B          | <b></b> 090    | •040           | •227          | }                       |                                 |                |                |              |
| • 450            | 252            | 190            | 104            | •010           | •185          | İ                       |                                 |                |                |              |
| •550             | 205            | <b></b> 159    | 094            | •001           | •149          | 1                       |                                 |                |                |              |
| •650             | 136            | 101            | 056            | •020           | •126          | 085                     | 049                             | 066            | 070            | 050          |
| •750             | 065            | 041            | 018            | •037           | •099          | 083                     | 021                             | 056            | 073            | 089          |
| •850             | •025           | •046           | •050<br>•064   | ●075<br>●069   | •076<br>•044  | 018<br>.005             | •058<br>•070                    | •016<br>•029   | 013<br>017     | 079<br>107   |
| •900             | •060           | •070           | •054           | • 007          | #U##          | •005                    | 1070                            | 1929           | ~ 0 0 1 1      | ~•107        |

Table III.- pressure coefficients for the combination of the wing, fuselage, vertical tail, and horizontal tail. Horizontal tail in the forward position;  $i_t$  =  $0^\circ$ 

(a)  $\alpha = -9.4^{\circ}$ ; M = 0.60

|                             |                |                | Cp            | for-         |                  |                |                | Cp for.        | -               | . <u></u>        |
|-----------------------------|----------------|----------------|---------------|--------------|------------------|----------------|----------------|----------------|-----------------|------------------|
| х                           | B=-3.9         | B=0°           | B=39          | B=7.9°       | B=12.70          | B=-3.9°        | B=0°           | B=39°          | B=79°           | B=127            |
| <del>x</del> <del>C</del> y |                | Z/             | by = 0.       | 11           |                  |                | Z              | by = 0.3       | 8               |                  |
| •                           |                |                |               |              | Left s           | ide            |                |                |                 |                  |
| •000                        | •728           | •819           | •554          | 150          | -1.033           | •452           | •805           | .540           | 109             | 723              |
| .025<br>.075                | •246<br>•105   | -•106<br>-•122 | 558<br>364    | 982<br>606   | -2.182<br>-1.102 | •338<br>•128   | -•091<br>-•146 | -:606<br>-:451 | -1:171<br>-:916 | -1.074<br>-1.056 |
| 150                         | -0002          | -•122<br>-•168 | 330           | 453          | 684              | •025           | 168            | 362            | 531             | 962              |
| 250                         | 039            | 137            | 237           | - 294        | 403              | 057            | 197            | 326            | 392             | 835              |
| •350                        | 066            | 146            | 216           | 239          | 316              | 121            | 226            | 335            | 344             | - 679            |
| . 450                       | 114            | 170            | 216           | 216          | 272              | 162            | 244            | 323            | 314             | 536              |
| •550                        | 112            | 150            | 180           | 173          | 2 <b>21</b>      | 160            | 219            | 264            | 260             | 435              |
| •650                        | 085            | 110            | <b>~.</b> 132 | 114          | 182              | 135            | 177            | 203            | 207             | 369              |
| •750                        | 057            | 064            | 066           | 071          | 157              | 094            | 113            | 116            | 146             | 318              |
| • 8 <b>5</b> 0              | •000           | 006            | 009           | 009          | 102              | 009            | 031            | 030            | 071             | 249              |
| • 900                       | •027           | •029           | •041          | •025         | 061              | 025            | •011           | •023           | 023             | 201              |
|                             |                |                |               |              | Right            | side           |                |                |                 |                  |
| •025                        | 484            | 064            | •283          | 4545         | •781             | 797            | 106            | •349           | •595            | •762             |
| •075                        | -•418          | 155            | •080          | •28 <b>0</b> | • <b>49</b> 1    | 475            | 168            | •125           | •328            | •505             |
| .150                        | 345            | 170            | •000          | •148         | •314             | -•379          | 184            | •023           | •171            | •328             |
| • 250                       | 260            | -•146          | 018           | •075         | ·195             | 340            | 204            | -•059          | •057            | .183             |
| • 350                       | -+240          | 161            | 080           | 004          | •096             | 336            | 230            | 114            | 025             | •089             |
| • 450<br>• 550              | -•228<br>-•185 | 181            | 118<br>109    | 061<br>073   | •015             | 327            | 244<br>221     | -•153<br>-•153 | 093             | 005              |
| .650<br>.650                | 133            | 155<br>106     | 082           | 061          | 017<br>024       | -0203          | 179            | 130            | 112<br>102      | 054<br>067       |
| 750                         | 073            | -•106<br>-•062 | 045           | 041          | 021              | 117            | 099            | 080            | 066             | 056              |
| 850                         | 011            | •005           | 018           | 016          | •011             | 009            | 011            | •025           | •005            | 024              |
| 900                         | •039           | •038           | .046          | •037         | •015             | •018           | •007           | •032           | •005            | 049              |
|                             |                | 2/             | by = 0        | .66          |                  |                | Z/b            | v = 0.93       |                 |                  |
|                             |                | <del></del>    |               |              | Left             | side           |                |                |                 |                  |
| •000                        | •397           | •812           | •499          | 116          | 352              | •498           | •734           | •194           | 153             | 375              |
| •025                        | •363           | 150            | 872           | -1.403       | 792              | •308           | 496            | -1.879         | -1.360          | 467              |
| •075                        | a146           | 204            | 576           | -1.066       | 824              | <b>00</b> 5    | 543            | -1.203         | 451             | 454              |
| • 150                       | ♦004           | 257            | 512           | 619          | 817              | <b>-</b> •228  | 567            | -1.150         | 440             | 449              |
| • 250                       | 105            | 299            | 474           | 440          | 674              | -•320          | 534            | 790            | 437             | 463              |
| • 350                       | 185            | 328            | 471           | 380          | 610              |                |                |                |                 |                  |
| 450<br>550                  | 224            | 352            | 440           | 360          | 536              |                |                |                |                 |                  |
| .550<br>.650                | -•238<br>-•192 | 317<br>232     | 371<br>271    | 344<br>317   | -•511<br>-•511   | 235            | 279            | 262            | 444             | 490              |
| 4750                        | 130            | -•232<br>-•153 | 164           | 305          | 502              | 126            | 150            | -0202<br>-0157 | 428             | -4461            |
| •850                        | 041            | 068            | 068           | 276          |                  | 030            | 040            | 066            | 394             | 412              |
| • 900                       | 018            | 033            | 023           | - 250        | 431              | •014           | •007           | 020            | 362             | - 392            |
| *****                       |                |                |               |              | Right            |                |                |                |                 | <u> </u>         |
| 025                         | 831            | 146            | •387          | <b>.633</b>  | •774             | -1.416         | 439            | •330           | •574            | ▶783             |
| 075                         | 619            | 226            | 121           | .344         | •510             | -1.381         | 545            | 027            | 201             | 431              |
| 150                         | <b>-•498</b>   | 250            | •000          | •173         | •330             | -1.276         | 547            | 223            | 041             | .158             |
| .250                        | -+491          | 308            | 102           | •027         | <b>174</b>       |                |                |                |                 |                  |
| • 350                       | 502            | 348            | 180           | ~.084        | •050             |                |                |                |                 |                  |
| 450                         | -+448          | ~.354          | 228           | 157          | -+054            |                |                |                |                 |                  |
| e550                        | -+384          | ~.323          | 228           | -•189        | 111              |                | - 224          |                | - 207           | 10*              |
| ∙650<br>•750                | 281<br>164     | 235<br>153     | 182<br>098    | 178<br>134   | ~•129<br>-•127   | -•231<br>-•139 | 230<br>144     | 189<br>112     | 207             | 196              |
|                             | 046            | -•040          | 004           | 071          | -•127<br>-•111   | 018            | 028            | -•112<br>-•002 | 191<br>130      | 194<br>159       |
| • 90°0                      | •000           | ~.006          | •023          | 068          | 136              | •027           | •023           | •023           | 143             | 182              |
| 3 700                       | L •000         |                | #V23          | - 4 0 0 0    | *170             | 1              | • UZ 3         | ***            | ***             | - 6 1 0 2        |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (b)  $\alpha=-9.6^\circ$ ; M=0.80

| Γ                                      |              |                | Cp                  | for-           |               | l              |                | Cp for          |   |   |
|--|--------------|----------------|---------------------|----------------|---------------|----------------|----------------|-----------------|---|---|
| - 🖈                                    | B=-3.9       | B=0°           |                     | B=7.9°         | B=12.7°       | B=-3.9°        |                | B=3.9°          |   | B=127°                                  |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |              |                | by = 0.             | <u> </u>       | 1,2,          | 0.0            | Z/             | $b_{v} = 0.3$   | 17                                      | D-12.1                                  |
| •                                      | <u> </u>     |                | <u> </u>            |                | Left s        | ide            |                | DV - 0.5        |   |   |
| -                                      | <del> </del> |                | 204                 |                |               | T              |                |                 |   |   |
| •000<br>•025                           | ●849<br>●232 | •883<br>-•098  | .720<br><b>54</b> 9 | •367<br>-•894  | 102<br>-1.422 | •663<br>•319   | •869<br>••074  | •732<br>-•988 - | •375<br>-1•622                          | -•098<br>-•976                          |
| ●075                                   | ●095         | 128            | 387                 | 797            | -1:118        | •122           | ~•151          |                 | 1 • 406                                 | 965                                     |
| •150<br>•250                           | 015          | ~•187<br>-•158 | 356<br>248          | 503            | 881<br>601    | •012           | 178            | 364             | 384                                     | 833                                     |
| • 350                                  | 095          | -•150<br>-•167 | 231                 | 281<br>229     | 389           | 080<br>172     | -•217<br>-•273 | 330<br>347      | 299<br>310                              | 765<br>595                              |
| 450                                    | 162          | 215            | 240                 | 215            | 290           | 248            | 341            | 350             | 296                                     | 439                                     |
| • 550                                  | 174          | 197            | 202                 | 177            | 229           | 269            | 301            | 289             | 243                                     | 357                                     |
| .650<br>.750                           | 151<br>101   | 154<br>083     | 145                 | -•125<br>-•073 | 198           | -•230          | 223            | 221             | 201                                     | 320                                     |
| 850                                    | 026          | 005            | 073<br>001          | 075<br>012     | 169<br>113    | 138<br>042     | -•126<br>-•018 | 132<br>037      | 148<br>076                              | 302<br>267                              |
| • 900                                  | •015         | .037           | .043                | •021           | 073           | •009           | •032           | •018            | 035                                     | 232                                     |
|  |              |                |                     |                | Right         | side           |                |                 | *****                                   |   |
| .025                                   | 422          | 028            | .286                | •541           | •773          | 908            | ••078          | •341            | •587                                    | •767                                    |
| •075                                   | 417          | 147            | •082                | •283<br>•142   | •491<br>•314  | -+462<br>-+376 | 157            | •117            | •320                                    | •512                                    |
| •150<br>•250                           | 360<br>266   | 178<br>152     | 011<br>043          | •070           | •198          | 328            | ·•184<br>·•221 | •009<br>-•081   | •172<br>•052                            | .337<br>.193                            |
| 350                                    | 246          | 186            | 111                 | 020            | •085          | 337            | 272            | 167             | 052                                     | •076                                    |
| a 450                                  | 254          | 220            | 173                 | 098            | 014           | 342            | <b></b> 318    | 244             | 147                                     | 046                                     |
| •550                                   | 200          | 195            | 178                 | 127            | -•063         | 293            | **301          | 262             | 192                                     | 115                                     |
| ●650<br>●750                           | 136<br>071   | 141<br>078     | 146<br>099          | 118<br>092     | 081<br>084    | 212<br>118     | ••227<br>••098 | -•231<br>-•134  | 186<br>127                              | -•137<br>-•124                          |
| 850                                    | .013         | .014           | 008                 | 020            | 044           | 018            | •006           | 015             | 049                                     | - 092                                   |
| •900                                   | ●047         | €040           | •024                | • 003          | 032           | •021           | .029           | .000            | 038                                     | 113                                     |
|  |              | Z/             | $b_{v} = 0.$        | 66             |               |                | Z/b            | =0.93           | -                                       |   |
|  |              |                |                     |                | Left          | s ide          |                |                 |   |   |
| •000                                   | •666         | <b>896</b>     | •743                | .392           | •007          | •755           | •840           | •677            | •311                                    | •061                                    |
| ●025                                   | • 346        | 108            | -1.117              | ~1.627         | 845           | •225           |                | -1•181 -        | 1.209                                   | 403                                     |
| ●075                                   | 134          | 186            | 487<br>- 432        | -1.383         | 860           | 079            | -•621          | 601             | 349                                     | - • 404                                 |
| ●150<br>●250                           | 017<br>150   | 258<br>346     | 472<br>425          | 714<br>467     | 793<br>538    | 339<br>464     | ••657<br>••728 | 548<br>528      | 343<br>348                              | 398<br>400                              |
| • 350                                  | 283          | 445            | -4437               | 333            | 502           | • + 0 +        | ****           | •>=0            | • | ••••                                    |
| • 450                                  | 399          | 515            | 432                 | 285            | 456           |                |                |                 |   |   |
| •550                                   | 435          | 447            | ~.371               | 282            | ~ 467         | - 220          | 266            | - 204           | _ 171                                   | _ ,                                     |
| •650<br>•750                           | 337<br>186   | 260<br>155     | 291<br>218          | 294<br>316     | 480<br>488    | -•339<br>-•213 | ••255<br>••117 | 394<br>368      | 372<br>383                              | 427<br>416                              |
| 850                                    | 101          | 043            | 140                 | 330            | 467           | 130            | 006            | 307             | 366                                     | 384                                     |
| • 900                                  | 071          | •002           | 108                 | <b>-</b> •325  | 459           | 110            | •035           | <b>~</b> •271   | 354                                     | 368                                     |
|  |              |                |                     |                | Right         | side           |                |                 |   |   |
| •025                                   | -1.097       | 095            | •379                | •625           | •786          | 875            | 370            | •260            | •585                                    | •799                                    |
| •075<br>•150                           | 481          | 204<br>244     | •122<br>-•006       | •344<br>•178   | •533<br>•353  | -•610<br>-•577 | ·•654          | 100<br>339      | •201<br>••073                           | .453<br>.164                            |
| 250                                    | 434          | 349            | 155                 | .013           | •183          | • > 1 1        | •000           | • 7 7           | 1013                                    |   |
| •350                                   | 459          | ~.445          | 288                 | 133            | •021          |                |                |                 |   | •                                       |
| •450                                   | 434          | 502            | 388                 | 259            | 112           |                |                |                 |   |   |
| •550<br>•650                           | 360<br>287   | 444            | -426                | 331            | 206           | - 240          |                | - 270           | - 201                                   | _ ,,,                                   |
| •750                                   | 212          | 260<br>146     | 345<br>178          | 308<br>214     | 230<br>211    | 360<br>354     | ·•232<br>·•104 | 279<br>187      | 301<br>243                              | 272<br>247                              |
| 850                                    | 126          | 008            | 058                 | - 124          | 157           | - 295          | •009           | 091             | 157                                     | -1169                                   |
| •900                                   | 083          | •038           | 030                 | 128            | 188           | 254            | .052           | 076             | 165                                     | 188                                     |
|  |              |                |                     |                |               |                |                | ·               |   | لــــــــــــــــــــــــــــــــــــــ |

TABLE III. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (c)  $\alpha = -9.7^\circ$ ; M = 0.85

|                |                |                | Cp             | for-           |                  |                |              | Cp for         |                  | <del></del>  |
|----------------|----------------|----------------|----------------|----------------|------------------|----------------|--------------|----------------|------------------|--------------|
| <u>x</u>       | B = -3.9°      | B=0°           | B=3.9°         | B=7.9°         | B=12.7°          | B=-3.9°        |              | B=39°          |                  | B=12.7°      |
| Cv             |                | 2/             | by = 0.1       | 7              |                  |                | Z            | by = 0.3       | 38               | 4            |
|                |                |                |                |                | Left s           | ide            | <del> </del> |                |                  | · · · ·      |
| •000           | .880           | •907           | •758           | •468           | •051             | •702           | ●885         | •771           | •487             | •042         |
| ●025<br>●075   | •250<br>•109   | 105<br>136     | 549<br>426     | 870<br>794     | -1.382<br>-1.083 | •326<br>•130   | 078<br>163   |                | -1.417<br>-1.278 | 999<br>998   |
| 150            | 016            | 210            | 383            | 656            | ~.834            | •019           | -197         |                | -1.278<br>-1.127 | 825          |
| •250           | -e048          | 177            | 263            | 303            | 627              | 078            | 230          | 341            | 227              | 776          |
| •350           | -•093          | -•192          | 245            | 216            | 424              | 171            | 296          | <b>-</b> •355  | 233              | 602          |
| • 450<br>• 550 | -•174<br>-•206 | 252            | -•255<br>- 212 | -•200<br>160   | -•304<br>- 333   | 273            | 404          | 366            | 268              | - 439        |
| 650            | 197            | -•262<br>-•223 | 212<br>155     | 169<br>127     | 233<br>202       | 320<br>321     | 431<br>350   | 305<br>232     | -•233<br>-•206   | 357<br>318   |
| 750            | 143            | 129            | 086            | 080            | 179              | 203            | 161          | -4146          | 160              | <b>3</b> 16  |
| ∙850           | -+047          | 028            | 004            | 025            | 135              | 061            | 030          | 050            | 093              | 281          |
| •900           | •006           | •025           | •033           | •014           | -•096            | 006            | •029         | •009           | 049              | 247          |
|                |                | _              |                |                | Right            | side           |              |                |                  |              |
| •025<br>•075   | 414            | 030<br>163     | •300<br>•086   | •542<br>•283   | ∙767<br>•487     | 948<br>527     | 081<br>172   | •348<br>•119   | •581<br>•318     | •760<br>•508 |
| 150            | 387            | 199            | 017            | 143            | •308             | 374            | 197          | •007           | .170             | 336          |
| •250           | 267            | 173            | 047            | .066           | •192             | 327            | 227          | 082            | .049             | .186         |
| •350           | 254            | 211            | 119            | 023            | •081             | 333            | 298          | ~.176          | 060              | .066         |
| •450<br>•550   | -•253<br>-•201 | 265            | 193<br>219     | 117            | 031              | 343            | 380          | 275            | 170              | 062          |
| 650            | 141            | -•267<br>-•206 | -•219<br>-•195 | 156<br>166     | -•093<br>-•122   | 298<br>216     | 415<br>350   | 326<br>319     | 240<br>267       | 153<br>197   |
| •750           | 076            | 120            | 143            | 145            | 137              | 124            | 110          | 213            | -•206            | 189          |
| 850            | •010           | 008            | 034            | 055            | 088              | 028            | 002          | 039            | 092              | 137          |
| •900           | ●049           | •030           | •007           | 021            | 072              | •014           | •025         | 023            | 065              | 150          |
|                |                | Z/             | $b_{V} = O$    | 66             |                  |                | Z/b          | , =0.93        |                  |              |
|                |                |                |                |                | Left             | s ide          |              |                |                  |              |
| •000           | •704           | •909           | •781           | · 495          | •102             | •802           | .879         | •731           | •459             | .173         |
| •025           | ♦360           |                |                | -1.485         | 887              | <b>♦24</b> 9   | 312          | -1.027         | -1.109           | 387          |
| •075           | •154           | -•176          | 804            | -1.308         | 853              | 046            | - 518        | 496            | 340              | 381          |
| •150<br>•250   | 003<br>138     | 245<br>330     | -•461<br>-•403 | ~1.130<br>394  | -•766<br>-•566   | 310<br>456     | 714<br>764   | 455<br>441     | 338<br>343       | 381<br>387   |
| • 350          | 276            | 462            | 414            | 278            | 516              | •470           | • 104        | • 447          | 545              | 507          |
| • 450          | 416            | 595            | 428            | 280            | 435              |                |              |                |                  |              |
| •550           | 514            | ~∙685          | 378            | -•297          | 434              |                |              |                |                  |              |
| •650<br>•750   | 557<br>233     | 569<br>122     | 302<br>246     | 314<br>328     | ~•449<br>~•462   | -•628<br>-•303 | 395<br>303   | ÷398           | 367              | 409          |
| 850            | 106            | 054            | 189            | =•328<br>=•348 | -4455            | 184            | 149          | -•385<br>-•339 | -•371<br>-•360   | 409<br>390   |
| •900           | 086            | -009           | 162            | 357            | 459              | 153            | -•086        | 316            | 354              | 380          |
|                |                |                |                |                | Right            |                |              |                |                  |              |
| • 025          | -1.071         | ~•084          | •386           | •622           | •793             | 748            | 293          | •287           | 4598             | .818         |
| +075           | 774            | 192            | •133           | •343           | •535             | 468            | 607          | 076            | •219             | .464         |
| •150           | 416            | -•234          | •007           | •182           | •358             | 457            | 634          | 329            | 072              | •170         |
| •250<br>•350   | 387<br>417     | 339<br>472     | 146<br>282     | •016<br>-•140  | •185<br>•016     |                |              |                |                  |              |
| • 450          | 417            | ~•589          | 431            | ~.283          | 139              |                |              |                |                  |              |
| •550           | 354            | 660            | - 524          | 397            | 267              |                |              |                |                  |              |
| •650           | ~•287          | 507            | 548            | 474            | 347              | 368            | 368          | <b></b> 521    | 649              | 525          |
| •750           | 240            | 125            | 272            | 432            | 334              | 368            | 278          | 345            | 317              | - 4276       |
| •850           | 176            | 022            | 083            | 143            | 189              | ~.327          | 148          | 183            | 174              | 174          |
| •900           | 141            | •022           | 063            | 142            | -•204            | -•290          | -•078        | 146            | 166              | 183          |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (d)  $\alpha=-9.8^\circ$ ; M=0.90

|                | 1              |                        | Cp             | for-           |                        |                        |                  | Cp for                | -               |                       |
|----------------|----------------|------------------------|----------------|----------------|------------------------|------------------------|------------------|-----------------------|-----------------|-----------------------|
| X   C_V        | 18 = -3.5      | 9° B=0°                |                |                | B=12.70                | B=-3.90                | B=0°             | B=3.90                | B=79°           | B=12.70               |
| C <sub>v</sub> |                | z/                     | bv =0          | .//            |                        |                        | Z                | <del> </del>          | 1/              | יבי יבן               |
|                |                |                        |                |                | Left s                 | ide                    | - <u></u>        |                       | <del></del> -   |                       |
| •000           | •913           | •926                   | •817           | <b>.</b> 568   | 162                    | •751                   | •893             | •821                  | . 507           | 150                   |
| •025<br>•075   | •238           | 095<br>133             | 470<br>450     | 822<br>740     | -1.239                 | ●320                   | 069              | 893                   | •587<br>-1•228  | •152<br>-•9 <b>60</b> |
| •150           | 020            | 211                    | 417            | 675            | -•972<br>-• <b>796</b> | •126<br>•017           | ~•162<br>~•191   | 681<br>443            | -1.131          | 948                   |
| • 250          | 054            | 178                    | 279            | -:620          | 683                    | 070                    | ~.218            | - 295                 | ~1.057<br>~.867 | ~.750<br>~.745        |
| • 350<br>• 450 | -•096<br>-•183 | -•183<br>-•250         | 235            | 274            | 510                    | 170                    | 285              | 362                   | 190             | - 649                 |
| • 550          | 238            | -•295<br>-•295         | 257<br>215     | -•172<br>-•137 | -•378<br>-•286         | 295                    | ~•381            | 335                   | 147             | 488                   |
| •650           | 272            | 295                    | 165            | -•112          | 233                    | 353<br>427             | ~•451<br>~•506   | -•317<br>-•237        | 180             | 386                   |
| • 750          | 280            | 189                    | 093            | 084            | 208                    | 449                    | -•266            | -0257<br>-0157        | ~•195<br>-•179  | 333<br>305            |
| •850<br>•900   |                | 033                    | 013            | 039            | 161                    | 229                    | . 021            | ~•063                 | 124             | ~•282                 |
| • 700          |                | •022                   | •029           | 004            | 135                    | -•079                  | •038             | 007                   | 083             | 257                   |
|                | <u> </u>       | <del> </del>           |                |                | Right                  | side                   |                  |                       |                 |                       |
| •025<br>•075   | -•364<br>-•479 | 023<br>167             | •294<br>•079   | •535           | •787                   | B65                    | 089              | •338                  | •571            | •772                  |
| •150           | 444            | -•209                  | 021            | •284<br>•139   | •508<br>•330           | 696                    | - 183            | •115                  | •313            | •522                  |
| •250           | 312            | 173                    | 042            | •070           | •217                   | 529<br>293             | -•198<br>-•221   | •011<br><b>-•</b> 077 | •169            | •351                  |
| • 350          | -•258          | -•211                  | 117            | 031            | •094                   | 348                    | 291              | 171                   | •051<br>-•063   | •206<br>•086          |
| ●450<br>●550   | -•266<br>-•213 | -•259                  | 194            | 125            | 022                    | 312                    | 369              | 277                   | 178             | 048                   |
| 650            | 158            | ~•303<br><b>~•28</b> 2 | 245<br>259     | 183            | -•096                  | 329                    | 453              | 351                   | 262             | 152                   |
| •750           | 090            | 191                    | 297            | -•216<br>-•270 | -•148<br>-•219         | -•2 <b>36</b><br>-•142 | 486              | ~.406                 | 325             | 227                   |
| •850           | -4003          | 026                    | 119            | 156            | 192                    | -•052                  | -•339<br>•021    | -•431<br>-•247        | 369             | -+288                 |
| •900           | •033           | •025                   | 049            | 095            | 189                    | 016                    | •033             | 073                   | -•286<br>-•203  | 282<br>340            |
|                |                | 2/                     | $b_v = 0$      | .66            |                        |                        | Z/b.             | =0.93                 |                 |                       |
| •              |                |                        |                |                | Left                   | s ide                  |                  |                       | ····            |                       |
| •000           | •748           | •925                   | .831           | •587           | 202                    | .838                   | 902              | 701                   |                 |                       |
| •025           | +368           | 069                    | 977            | -1.291         | 836                    | •296                   | -1206            | •791<br>-•881         | •548<br>-1•041  | •217<br>•377          |
| •075<br>•150   | •165           | 154                    | 823            | -1.156         | 815                    | 007                    | -,439            | 415                   | -:341           | 380                   |
| •250           | •017<br>-•114  | 219<br>298             | 689<br>357     | -1.075         | 759                    | 268                    | -,643            | 366                   | 333             | 376                   |
| •350           | 256            | 417                    | ~.279          | -•658<br>-•276 | 619<br>578             | 434                    | -1734            | 349                   | <b>-•33</b> 5   | 377                   |
| •450           | 407            | 557                    | 374            | 222            | 422                    |                        |                  |                       |                 | ſ                     |
| •550           | -4529          | 673                    | 383            | <b>~</b> •281  | 408                    |                        |                  |                       |                 | ł                     |
| ●650<br>●750   | -#604<br>-#671 | <b>~</b> ∙687          | -•290          | 313            | 420                    |                        | 378              | 353                   | 361             | - 398                 |
| 850            | 561            | -•293<br>-•038         | 270<br>254     | -•346<br>-•371 | 434                    |                        | - 390            | 361                   | 363             | 397                   |
| •900           | 284            | 018                    | 246            | -•3/1<br>-•385 | 438<br>449             |                        | =-342<br>=-298   | 347                   | 355             | - 389                 |
|                |                |                        |                |                |                        |                        | 248              | -•338                 | 354             | 382                   |
| •025           | 967            | 070                    | •389           | •619           |                        | side                   |                  |                       |                 |                       |
| •075           | 825            | 185                    | •143           | •351           | •799<br>•548           | -•714<br>-•399         | -, 230<br>-, 535 | e317                  | •615            | •847                  |
| •150           | 660            | 222                    | •023           | .194           | •381                   |                        | -, 582           | 041<br>299            | •240<br>-•043   | •498<br>•208          |
| • 250<br>• 350 | -•341<br>-•296 | 309                    | 117            | •034           | •212                   |                        |                  | •-//                  | 4043            | • 200                 |
| 450            | 380            | -•438<br>-•566         | 262<br>395     | -•120<br>-•276 | •048                   |                        |                  |                       |                 |                       |
| •550           | 374            | 653                    | 538            | -•276<br>-•387 | 111<br>247             |                        |                  |                       |                 | 1                     |
| ●650           | 299            | 690                    | 595            | - 492          | 346                    | ~•371 ·                | -,439            | 799                   | -•731           |                       |
| •750<br>•850   | -•287          | 347                    | 654            | 561            | 462                    |                        | - 406            | 681                   |                 | - 655                 |
| 900            | 260<br>242     | 013<br>.014            | -•607<br>-•291 | - 589          | -•478                  | 349                    | 318              | 435                   |                 | - 613                 |
|                | 1.76           | •014                   | -0271          | -∙575          | 494                    | ~.333 .                | -•2 <b>58</b>    | 358                   |                 | 412                   |
|                |                |                        |                |                |                        |                        |                  |                       |                 |                       |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (e)  $\alpha=-9.8^\circ$ ; M=0.92

|                  | Cp for-        |                |                |                       |                   | Cp for-                               |                |            |                                       |                |  |
|------------------|----------------|----------------|----------------|-----------------------|-------------------|---------------------------------------|----------------|------------|---------------------------------------|----------------|--|
| x C <sub>V</sub> | B=-3.9         | \$ =0°         | 1'             | B=7.90                | B=12.7°           | B=-3.9°                               | B=0°           | B=39°      | B=7.9°                                | B=12.7         |  |
| Cv               |                | 2/             | bv = 0.1       | 1                     |                   |                                       | Z/             | bu = 0.    | <del>3</del> 8                        |                |  |
|                  |                |                | • •            |                       | Left s            | s ide                                 |                |            |                                       |                |  |
| •000             | •927           | •940           | .831           | •573                  | •191              | •746                                  | .898           | .829       | •593                                  | •185           |  |
| •025             | •270           | <b>-</b> ∙095  | 468            | 876                   | -1.215            | •341                                  | 066            |            | -1.184                                | 797            |  |
| •075<br>•150     | -126<br>-4006  | -•135<br>222   | 490<br>480     | -•749<br>-•715        | -•969<br>-•830    | •142<br>•031                          | -•172<br>-•199 |            | -1.094                                | 798<br>806     |  |
| 250              | 043            | -•222<br>-•188 | 513            | -•715<br>-•722        | 661               | 058                                   | 218            | 536        | -1.052<br>965                         | 772            |  |
| 350              | 090            | 192            | 291            | 479                   | 545               | 160                                   | 285            | 388        | 653                                   | 642            |  |
| • 450            | ~.177          | 256            | 279            | 258                   | 439               | 273                                   | 372            | 365        | 149                                   | 510            |  |
| ●550             | 252            | 315            | 236            | 120                   | 353               | ~•355                                 | 460            | 258        | 112                                   | 442            |  |
| •650             | -•279          | 334            | 186            | 105                   | <del>-</del> •307 | -•429                                 | 524            | 283        | 161                                   | 417            |  |
| • 750            | ~.338          | 332            | 130            | 094                   | 282               | 459                                   | 535            | 212        | 191                                   | 410            |  |
| •850<br>•900     | 246            | 075            | 046            | 067                   | 245               | 450                                   | 067            | 123        | 171                                   | 403            |  |
| 1900             | 116            | •006           | 004            | 040                   | Right             | -•271<br>Side                         | •031           | 060        | 140                                   | -,361          |  |
| •025             | 379            | 028            | •292           |                       |                   | · · · · · · · · · · · · · · · · · · · | - 004          | •329       | 670                                   | •769           |  |
| 075              | 528            | 177            | 076            | •555<br>•2 <b>9</b> 9 | ∙795<br>•506      | 861<br>768                            | -•096<br>-•197 | 109        | •579<br>•322                          | •516           |  |
| •150             | 490            | 232            | 028            | .152                  | •333              | 619                                   | 211            | •001       | •178                                  | .348           |  |
| ▶250             | 470            | 180            | 051            | •072                  | •211              | 495                                   | 231            | 081        | •058                                  | .207           |  |
| ■350             | 293            | 216            | 126            | 027                   | •090              | 343                                   | <b>-</b> •298  | 176        | 055                                   | •080           |  |
| • 450            | 273            | 274            | 207            | 126                   | 026               | 270                                   | <b>368</b>     | 277        | 177                                   | 054            |  |
| •550             | 206            | 324            | 278            | 194                   | 106               | 288                                   | -•463          | 375        | 258                                   | 157            |  |
| •650<br>•750     | -•175<br>-•118 | 311<br>344     | 279<br>362     | 226<br>322            | 164<br>258        | -•276<br>-•178                        | 519<br>489     | 420<br>456 | 335<br>377                            | -•236<br>-•309 |  |
| 850              | 025            | 067            | 281            | 263                   | 235               | 087                                   | ~•043          | 471        | 386                                   | 309            |  |
| 900              | •010           | •006           | 177            | - 242                 | 309               | 054                                   | •051           | 442        | 412                                   | - 385          |  |
|                  | ,              | 2/             | $b_{\nu} = 0.$ | 66                    |                   | z/b <sub>v</sub> =0.93                |                |            |                                       |                |  |
|                  | Left side      |                |                |                       |                   |                                       |                |            |                                       |                |  |
| •000             | •749           | •930           | .844           | •600                  | •228              | .845                                  | •916           | •810       | •568                                  | .245           |  |
| ●025             | ▶385           | 058            | 941            | -1.230                | 866               | •327                                  | 211            |            | -1.027                                | 458            |  |
| •075             | •183           | 154            |                | -1.114                | ~.865             | •026                                  | 413            | 416        | 374                                   | 435            |  |
| •150             | •034           | 223            |                | -1.074                | <b></b> 789       | 238                                   | 631            | 372        | 364                                   | 418            |  |
| •250             | 098            | 292            | 675            | 970                   | 579               | 411                                   | 737            | 363        | 368                                   | 418            |  |
| ●350<br>●450     | -•235<br>-•384 | 408<br>545     | 321<br>240     | -•428<br>-•279        | -•471<br>-•451    |                                       |                |            |                                       |                |  |
| •550             | 514            | -+545<br>-+667 | 340            | 294                   | -•451<br>-•462    |                                       |                |            |                                       |                |  |
| 650              | 590            | 730            | 340            | 349                   | 476               | -4829                                 | 395            | 374        | 382                                   | 431            |  |
| •750             | 656            | 644            | 341            | 382                   | 490               | 913                                   | 408            | 389        | 386                                   | - 431          |  |
| ●850             | 648            | 126            | 350            | 403                   | 480               | 684                                   | 404            | 382        | 383                                   | 421            |  |
| •900             | 671            | -•050          | 353            | -•420                 | 485               | 527                                   | 379            | 376        | 385                                   | 413            |  |
|                  |                |                |                |                       | Right             |                                       |                |            | · · · · · · · · · · · · · · · · · · · |                |  |
| •025             | 953            | 072            | •388           | •624                  | •799              | 711                                   | 214            | •330       | •631                                  | .850           |  |
| •075<br>•150     | -•832<br>-•748 | 186<br>224     | •143<br>•023   | •360<br>•204          | •549<br>•373      | 394<br>375                            | 518<br>589     | 030<br>275 | •262<br>-•021                         | ∙503<br>•208   |  |
| •250             | 681            | 313            | 118            | • 046                 | •212              |                                       |                |            | -4021                                 | 1200           |  |
| 350              | 151            | 434            | 260            | 114                   | •047              |                                       |                |            |                                       |                |  |
| •450             | 272            | 566            | 396            | 262                   | 110               |                                       |                |            |                                       |                |  |
| •550             | 358            | 666            | 539            | 379                   | 243               |                                       |                |            |                                       |                |  |
| <b>♦650</b>      | 339            | 742            | 606            | 475                   | ~•362             | 390                                   | 484            | 834        | 717                                   | 574            |  |
| •750             | 343            | 665            | 665            | ~.557                 | -•458             | 391                                   | -• 456         | 877        | 797                                   | 655            |  |
| •850             | 337            | 133            | 663            | 581                   | 497               | 375<br>350                            | 400            | 674        | 788                                   | 658            |  |
| •900             | -•326          | -•037          | 691            | 612                   | 530               | -•359                                 | 351            | 564        | -4599                                 | 619            |  |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (f)  $\alpha = 0^\circ$ ; M = 0.60

|                   | Cp for-                       |                |                |                       |                  | Cp for-        |                  |                                |              |                |  |
|-------------------|-------------------------------|----------------|----------------|-----------------------|------------------|----------------|------------------|--------------------------------|--------------|----------------|--|
| , x               | B=-3.9                        | B=0°           | B=39           | B=7.9                 | B=12.7°          | B=-3.9°        | B=0°             | B=3.9°                         | B=7.9        | · B=12.7°      |  |
| $\frac{x}{C_{V}}$ |                               | Z              | by = 0.        | 11                    | 17               |                | Z                | /by = 0.                       | 38           |                |  |
|                   | Left side                     |                |                |                       |                  |                |                  |                                |              |                |  |
|                   |                               |                |                |                       |                  |                |                  |                                |              |                |  |
| •000              | •606<br>•287                  | •675<br>-•090  | •344<br>-•546  | 455<br>-1 - 109       | -1.251<br>-1.849 | •271<br>•354   | - 086            | •314<br><b>-•64</b> 9          | -1.040       | -1.233         |  |
| •075              | •142                          | 111            | 378            | 665                   | -1.435           | •170           | 125              | 447                            | 920          | 920            |  |
| •150              | •050                          | 136            | 318            | 464                   | 874              | ●075           | • 136            | 341                            | 674          | 893            |  |
| •250              | •029                          | 100            | 212            | 284                   | 444              | •006           | - +146           | 295                            | 409          | - 817          |  |
| • 350<br>• 450    | -•017<br>-•061                | 113<br>125     | 189<br>178     | 231<br>195            | -•336<br>-•295   | 052<br>089     | ••178<br>••194   | <b>~</b> •290<br><b>~</b> •270 | 319<br>266   | 707<br>587     |  |
| -550              | 052                           | -•125<br>-•109 | 141            | 151                   | - 293            | 089            | - 159            | 208                            | 220          | - 470          |  |
| •650              | 038                           | 077            | 090            | 109                   | 217              | 066            | 123              | 155                            | 176          | 392            |  |
| •750              | 015                           | 026            | 031            | 059                   | 148              | 029            | 061              | 079                            | 123          | 313            |  |
| ∙850              | •029                          | •025           | •025           | 010                   | 072              | •024           | •013             | •006                           | 052          | 233            |  |
| •900              | ●052                          | •059           | •057           | •020                  | -•028            | •059           | •052             | •048                           | 008          | 182            |  |
|                   |                               | Right side     |                |                       |                  |                |                  |                                |              |                |  |
| ●025              | 482                           | 035            | •321           | •612                  | •831             | 648            | 061              | •390                           | •610         | •744           |  |
| +075              | 394                           | 118            | •130           | • 354                 | •556             | 447            | 116              | •169                           | •382         | •539<br>•390   |  |
| •150<br>•250      | 315<br>228                    | -•129<br>-•104 | •050<br>•020   | •218<br>•156          | ∙381<br>•275     | 350<br>292     | -•132<br>-•146   | •075<br>•013                   | •239<br>•137 | • 2 <b>6</b> 8 |  |
| •350              | 202                           | 118            | 024            | •075                  | •174             | - 274          | 159              | 035                            | 068          | 183            |  |
| •450              | 184                           | 136            | 067            | .015                  | •098             | 200            | 136              | 084                            | 022          | .049           |  |
| •550              | 140                           | 104            | 054            | .008                  | •073             | 211            | 150              | 077                            | 015          | •052           |  |
| •650              | 080                           | 070            | 033            | • 006                 | •061             | 147            | - •111           | 054                            | 015          | •034           |  |
| •750              | 031                           | 021            | 001            | •024                  | •048             | 070            | 040              | 005                            | •004         | •031           |  |
| •850<br>•900      | •043                          | •041<br>•066   | •050<br>•064   | ∙057<br>•066          | •073<br>•068     | •024<br>•052   | ●036<br>●052     | •059<br>•059                   | •047<br>•047 | •031<br>•011   |  |
| . 700             | •000                          |                |                |                       | •000             | 1032           |                  |                                |              | •011           |  |
|                   | $z/b_v = 0.66$ $z/b_v = 0.93$ |                |                |                       |                  |                |                  |                                |              |                |  |
| 1                 |                               |                |                |                       | Left             | s ide          |                  |                                |              |                |  |
| •000              | •163                          | •751           | •220           | 324                   | 654              | ●394           | •779             | •036                           | 248          | -4509          |  |
| ●025              | •403                          | -•109          | 959            | -•987                 | 720              | 495            | • • 313          | -1.357                         | 701          | 484            |  |
| •075              | •209                          | -•139<br>-•164 | 546<br>433     | 936<br>840            | -•743<br>-•775   | •221           | -•316<br>-•334   | -1.152<br>-1.033               | 367<br>354   |                |  |
| •150<br>•250      | ◆091<br>◆010                  | -•184<br>-•182 | -•433<br>-•378 | 598                   | -•707            | 103            | • 329            | <b>-1.</b> 605                 | 356          | 449            |  |
| •350              | 054                           | 215            | 364            | 377                   | 546              | 1              | *,,,,            | •003                           | •330         | •              |  |
| .450              | 105                           | 233            | 336            | 275                   | 511              | i              |                  |                                |              |                |  |
| ●550              | 119                           | 212            | 281            | 261                   | 504              |                |                  |                                |              |                |  |
| •650              | 089                           | 159            | 198            | 277                   | -•493            | -•131<br>-•054 | - •180<br>- •079 | 185<br>093                     | 397          | 438<br>401     |  |
| •750<br>•850      | -•038<br>•017                 | -•077<br>-•003 | 111<br>024     | 280<br>252            | -•461<br>-•408   | •022           | •025             | <b></b> 093                    | 390<br>351   | -•401<br>-•34B |  |
| 900               | 031                           | -•003<br>•027  | •015           | 236                   | <b>~</b> •385    | 052            | .064             | •029                           | 328          | 320            |  |
|                   |                               |                | *****          |                       |                  | side           |                  |                                |              |                |  |
| •025              | 805                           | 051            | •441           | •640                  | 742              | -1.264         | - 0164           | •542                           | .746         | •910           |  |
| 075               | 532                           | 129            | •208           | 409                   | •558             | 897            | 281              | .215                           | 421          | .631           |  |
| •150              | 396                           | 136            | •103           | •271                  | •418             | -1.038         | ·• 297           | •022                           | •199         | • 390          |  |
| • 250             | -•375                         | -•178          | •020           | •163                  | •298             |                |                  |                                |              |                |  |
| • 350             | 371<br>334                    | 208<br>219     | 056<br>097     | •057<br><b>-</b> •015 | •192<br>•100     |                |                  |                                |              |                |  |
| • 450<br>• 550    | 278                           | -•219<br>-•205 | 111            | 054                   | •029             |                |                  |                                |              |                |  |
| 650               | 195                           | 150            | 088            | 056                   | 001              | 114            | 129              | 111                            | 112          | 086            |  |
| •750              | 103                           | 074            | 038            | 047                   | 024              | 077            | 072              | 056                            | 130          | 111            |  |
| 850               | •006                          | •027           | .041           | 017                   | 042              | •017           | •041             | •031                           | 105          | 109            |  |
| •900              | ●047                          | •050           | •061           | 022                   | 081              | •047           | •080             | •061                           | 118          | 136            |  |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  = 0° - Continued (g)  $\alpha$  = 0°; M = 0.80

|                   |                |                       | Cp i          | for-           |                        |              |                | Cp for         | -            |              |
|-------------------|----------------|-----------------------|---------------|----------------|------------------------|--------------|----------------|----------------|--------------|--------------|
| x                 | B=-3.9         | B=0°                  | B=3.9°        | B=7.9°         | B=12.7°                | B=-3.9°      | B=0°           | B=39°          | B=7.9°       | B=127°       |
| $\frac{x}{c_{y}}$ |                | 2/                    | by = 0.1      | 7              |                        |              | Z/             | $b_V = O$ .    | 38           |              |
|                   |                |                       |               | ·              | Left s                 | ide          |                |                |              |              |
|                   | 724            |                       |               | 100            | - 244                  | 496          | •781           | <b>.54</b> 9   | •075         | 348          |
| 000               | •726<br>•295   | •680<br><b>-</b> •059 | •546<br>-•525 | •190<br>-1•131 | 264<br>945             | 353          | 068            | - 932          | -1.224       | - 670        |
| •075              | <b>4158</b>    | 0.92                  | 367           | 851            | 840                    | •175         | 121            | 442            | -1.046       | 627          |
| 150               | ●058           | -•132                 | 324           | 471            | 746                    | •082         | 140            | <b>-</b> •336  | 851          | 653<br>653   |
| • 250             | •035           | 098                   | 212<br>196    | 282<br>229     | ~•620<br><b>~•5</b> 19 | -005<br>-061 | 156<br>202     | -•286<br>-•289 | 518<br>312   | - 591        |
| • 350<br>• 450    | -•018<br>-•070 | -•123<br>-•149        | 188           | -•229<br>-•197 | 463                    | 122          | 231            | 283            | 236          | 513          |
| 550               | -4068          | 123                   | 145           | 147            | 372                    | 117          | 194            | 225            | 188          | 430          |
| 650               | 059            | 091                   | 094           | 106            | 290                    | 094          | 146            | -•159          | 159          | 352          |
| •750              | 024            | 033                   | 030           | 063            | 206                    | 044          | -•061          | 071            | 116          | 279          |
| ●850              | •027           | •034                  | •036          | 002            | 121                    | •026         | •028<br>•073   | •016<br>•062   | 051<br>004   | 228<br>199   |
| •900              | •061           | •070                  | •076          | •031           | -•073                  | •067         | 4073           | *002           |              | - 6 2 7 7    |
|                   |                |                       |               |                | Right                  | side         |                |                |              |              |
| ●025              | 411            | •006                  | •340          | •606           | .829                   | 976          | 042            | •386           | •617         | •754         |
| ♦075              | 390            | 095                   | •149          | • 360          | •561                   | 429          | 112            | •177<br>•085   | •384<br>•249 | •549<br>•403 |
| •150              | 314            | 121                   | •060          | •228<br>•158   | ∙402<br>•295           | 335<br>277   | 123<br>135     | •014           | 148          | 286          |
| • 250<br>• 350    | -•216<br>-•199 | 098<br>127            | •027<br>-•026 | •075           | •192                   | 269          | -•171          | 048            | •067         | 195          |
| 450               | 186            | 146                   | 073           | •008           | 104                    | 219          | 168            | 094            | 016          | •084         |
| •550              | 137            | 120                   | 068           | 009            | •067                   | 222          | 185            | 117            | 043          | •047         |
| •650              | 075            | 080                   | 050           | 010            | .043                   | 146          | 124            | 088            | 043          | •017         |
| •750              | 021            | 024                   | 018           | •001           | •028                   | 053          | 045            | 032            | 021          | •003         |
| •850              | •053           | •047                  | •042          | .045           | •043                   | •040         | •049           | •045           | •026         | •000         |
| •900              | •090           | •076                  | •060          | •057           | •031                   | •079         | •079           | •063           | •026         | 033          |
|                   |                | Z/                    | 'bv = 0.      | 66             |                        |              | 2/0            | , =0.93        |              |              |
|                   |                |                       |               |                | Left                   | s ide        |                |                |              |              |
| •000              | •452           | •781                  | •497          | .125           | 380                    | •677         | •827           | •537           | .148         | 202          |
| 025               | •400           | 086                   | -1.070        | 714            | 735                    | •469         | 298            | 944            | 567          | 381          |
| •075              | •218           | <b>-</b> •127         | 519           | 701            | 746                    | •192         | 383            | -•607<br>-•577 | 291<br>288   | 372<br>366   |
| •150              | 104            | 165                   | 393           | 664            | 747<br>738             | 038<br>148   | -•393<br>-•375 | 560            | 292          | 381          |
| •250              | ±008<br>-±078  | 206<br>261            | 341<br>349    | 562<br>418     | -• 491                 |              |                | -4,560         | • 2 / 2      | • 501        |
| • 350<br>• 450    | 155            | 299                   | 346           | 303            | 434                    |              |                |                |              |              |
| •550              | 178            | 272                   | 295           | 254            | 437                    | 1            |                |                |              |              |
| •650              | 145            | 190                   | 211           | 250            | 454                    | 190          | 171            | 281            | 342          | 412          |
| •750              | 068            | 071                   | 125           | 260            | 456                    | 090          | 036            | 232            | 347          | 393          |
| •850              | •002           | •012                  | 041           | <b>~.</b> 250  | 430                    | 020<br>.003  | •067<br>•105   | 169<br>133     | 333<br>315   | 345<br>323   |
| •900              | •026           | •049                  | 003           | 238            | 415                    |              | •105           | ~ # 4 3 3      |              | 3223         |
|                   |                |                       |               |                | Right                  | side         |                |                |              |              |
| •025              | -1.055         | 030                   | •437          | *641           | •762                   | -1.073       | -•150<br>-•339 | •510<br>•178   | •770<br>•442 | •950<br>•663 |
| •075              | 487            | 114                   | •216          | •419<br>•290   | ∙585<br>•450           | 524<br>577   | ~•343          | 015            | 202          | • 420        |
| •150<br>•250      | 358<br>347     | 130<br>190            | •112<br>•011  | 170            | •326                   | - • 5 , 7    |                | •0.27          |              | • - •        |
| 350               | 361            | 243                   | 073           | .057           | •204                   |              |                |                |              |              |
| 450               | 345            | 279                   | 143           | 030            | •095                   | 1            |                |                |              |              |
| •550              | 283            | 257                   | 171           | -:091          | •017                   |              |                |                |              |              |
| •650              | 193            | 174                   | 140           | 109            | 033                    | 050          | 091            | <b>→</b> •122  | 141          | 123<br>149   |
| •750              | 103            | 071                   | 075           | 091            | -•068<br>068           | 193<br>135   | 030<br>.088    | 102<br>018     | 165<br>127   | 133          |
| .850              | •000           | •049                  | •022<br>•051  | 046<br>053     | 068<br>108             | -•091        | •123           | 003            | 138          | 155          |
| •900              | •046           | •088                  | •091          | 055            | -100                   |              |                |                |              |              |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FGRWARD POSITION;  $i_t$  = 0° - Continued (h)  $\alpha$  = 0°; M = 0.85

|                |                |                |                | for-           |                |                |                       | Cp for                |                                       |                |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|-----------------------|---------------------------------------|----------------|
| х              | B = -3.9       | B=0°           | B=3.9°         | B=7.9°         | B=12.7°        | B=-3.9"        | B=0°                  | B=3.9°                | B=7.9°                                | B=12.7°        |
| <u>x</u>       |                | Z/             | bv = 0.1       | 7              |                |                | Z/                    | $b_V = O$ .           | 38                                    |                |
| ľ              |                |                |                |                | Left s         | ide            |                       |                       |                                       |                |
| •000           | .748           | •685           | •596           | •304           | 114            | •548           | •795                  | •609                  | •190                                  | 225            |
| •025<br>•075   | •291<br>•154   | 052<br>090     | 515<br>374     | -1.094         | 928            | •347           | 064                   | -1.079                | -1.548                                | 582            |
| 150            | •052           | 135            | 334            | 862<br>617     | -•776<br>-•698 | •169<br>•072   | 122                   | 408                   | -1.364                                | 588            |
| • 250          | •034           | 106            | 218            | 270            | 581            | 002            | -•142<br>-•159        | 339<br>288            | -•666<br>-•306                        | 614<br>624     |
| •350           | 025            | 133            | 195            | 221            | 509            | 074            | 215                   | 288                   | 293                                   | ~.581          |
| • 450          | -•084          | 167            | 195            | 202            | 473            | 140            | 260                   | 283                   | 258                                   | 517            |
| ◆550<br>◆650   | -•086<br>-•081 | 143            | 151            | 149            | -+404          | 147            | 230                   | 226                   | 201                                   | 445            |
| •750           | ~•043          | 110<br>046     | 098<br>029     | 112<br>070     | -•330<br>-•253 | 129            | 172                   | 162                   | 162                                   | 379            |
| .850           | 015            | •033           | •036           | 012            | -•168          | 070            | -•073<br>•030         | 083<br>.007           | 117                                   | 311            |
| •900           | •045           | •073           | •071           | 019            | -•117          | •051           | •076                  | •059                  | 051<br>014                            | -•253<br>-•220 |
|                |                |                |                |                | Right          | side           |                       |                       |                                       |                |
| •025           | -•387          | •011           | ∙336           | •603           | •837           | 982            | 042                   | •380                  | +605                                  | •766           |
| •075<br>•150   | 393            | 099            | •143           | •354           | •572           | 429            | 116                   | •170                  | •370                                  | +557           |
| 250            | -•323<br>-•224 | -•129<br>-•109 | •059<br>•022   | •225<br>•151   | •408           | 334            | 133                   | •074                  | •240                                  | •408           |
| 350            | 202            | 137            | 040            | •065           | •302<br>•192   | -•275<br>-•270 | ~•150<br>-•192        | •002<br><b>-</b> •064 | •141                                  | •290           |
| •450           | -•193          | 166            | 096            | 012            | •096           | 241            | 208                   | 115                   | •058<br><b>~•</b> 035                 | .196<br>.084   |
| ▶550           | 142            | 140            | 095            | 030            | •062           | 224            | 216                   | 147                   | 073                                   | •033           |
| •650           | 083            | 097            | 075            | 034            | •031           | 149            | 157                   | 121                   | 077                                   | 006            |
| •750<br>•850   | 020<br>.051    | 037            | 040            | 033            | •010           | 060            | 054                   | 057                   | 053                                   | 020            |
| 900            | •082           | ∙046<br>•077   | •033<br>•051   | .024<br>.034   | •025<br>•010   | •034           | •050                  | •028                  | 001                                   | 024            |
|                |                |                |                |                | .010           | 1009           | •081<br>Z.A           | v = 0.93              | •003                                  | 065            |
|                |                |                | $b_{V} = 0.$   | 66             |                | <u> </u>       |                       | v - 0.93              | · · · · · · · · · · · · · · · · · · · |                |
|                |                |                |                |                | Left           | s ide          |                       |                       |                                       |                |
| •000           | ∙505           | •795           | •563           | .144           | <b></b> 267    | •730           | ●855                  | •619                  | •209                                  | 146            |
| •025<br>•075   | +396           | 076            | -1.155         | 962            | 696            | •442           | 272                   | 889                   | 522                                   | 404            |
| •150           | •215<br>•095   | -•125<br>-•165 | -•464<br>-•374 | 910<br>770     | 703            | •177           | 425                   | 493                   | 293                                   | 384            |
| 250            | 004            | 215            | 313            | 550            | 706<br>727     | 060<br>175     | 429<br>389            | -•437<br>-•429        | -•293<br>-•298                        | -•368<br>-•377 |
| • 350          | 101            | 290            | 323            | 364            | 502            | -•11           |                       |                       | -0290                                 | - • 3 / /      |
| • 450          | -•188          | <b>~.348</b>   | 326            | -4267          | 435            |                |                       |                       |                                       |                |
| •550           | 232            | 345            | 283            | 242            | 432            | 1              |                       |                       |                                       |                |
| •650           | 195<br>107     | -•230<br>-•073 | 220<br>147     | -:251<br>-:271 | 449<br>450     | - 235          | 155                   | 302                   | 336                                   | - • 405        |
| 850            | 022            | •024           | 080            | 274            | ~4432          | 127            | ~•02 <b>4</b><br>•073 | ~•283                 | ~.347                                 | -4386          |
| •900           | •001           | •061           | 043            | 264            | 423            | 035            | •113                  | 237<br>197            | 339<br>330                            | 355<br>337     |
|                |                |                |                |                | Right          |                |                       | 4271                  | • 330                                 | - 1221         |
| •025           | -1+145         | 030            | •433           | •644           | •771           | -1.012         | 143                   | 503                   |                                       |                |
| ●075           | 436            | 112            | .212           | 419            | •588           | 413            | 395                   | •501<br>•161          | •779<br>•443                          | •962<br>•673   |
| •150           | 334            | 133            | <b>+110</b>    | .288           | <b>4457</b>    | 435            | 382                   | 039                   | 196                                   | • 420          |
| •250           | 317            | 203            | •005           | •164           | •332           |                |                       |                       |                                       |                |
| • 350<br>• 450 | -•337<br>-•328 | 272            | 096            | +045           | •207           |                |                       |                       |                                       |                |
| •550           | 278            | 326<br>318     | 180<br>227     | 060<br>139     | •088<br>-•010  |                |                       |                       |                                       |                |
| •650           | 206            | 200            | 193            | -•155          | 010<br>065     | 168            | 139                   | 157                   | 183                                   | - 154          |
| •750           | 130            | 076            | 112            | 130            | 102            | 255            | - 022                 | 135                   | -•183<br>-•205                        | 154<br>181     |
| ●850           | -•038          | •056           | 006            | 073            | 091            | 208            | •090                  | 054                   | 149                                   | -•151<br>-•151 |
| •900           | •006           | €097           | •025           | 081            | 127            | -169           | •129                  | 044                   | 165                                   | 175            |

TABLE III. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (i)  $\alpha=0^\circ$ ; M=0.90

|                   |                |                | Cp 1           |                                |                |                |                | Cp for         |                  |              |
|-------------------|----------------|----------------|----------------|--------------------------------|----------------|----------------|----------------|----------------|------------------|--------------|
| х                 | B=-3.94        | B=0°           | B=39°          | B=7.9°                         | B=12.70        | B=-39°         | B=0°           | B=3.9°         | 1/               | B=127°       |
| $\frac{x}{C_{V}}$ | <del></del>    | l' <u> </u>    | $b_V = 0.1$    | <u> </u>                       | ·              |                | Z/             | by = 0.        | 38               |              |
| ٧٠                |                |                | <u> </u>       | ·                              | Left s         | ide            | ·              |                |                  |              |
| •000              | •780           | •696           | •649           | •412                           | •032           | •607           | •810           | <b>*669</b>    | •325             | 110          |
| •025              | •300           | 042            | 458            | 993                            | 922            | •348           | 062            | 979            | -1.344           | 541          |
| •075<br>•150      | •165<br>•061   | -•079<br>-•140 | ~•371<br>-•341 | 778<br>648                     | 739<br>647     | •173           | 125<br>137     | 436<br>319     | -1.216<br>-1.092 | 542<br>556   |
| •250              | •036           | 105            | 213            | 396                            | 526            | •005           | 156            | 272            | 236              | 566          |
| • 350             | 027            | 136            | 193            | 201                            | 470            | 077            | 227            | 274            | 245              | -,553        |
| 450               | ~•091          | <b>-</b> •182  | 195            | 182                            | 459            | 160            | 291            | 281            | <b></b> 270      | 507          |
| 550               | 101            | 171            | 146            | 146                            | 416            | 183            | 295            | 224            | 198              | 459          |
| •650              | -•114<br>-•075 | 141            | 094<br>024     | 111<br>067                     | 363<br>305     | -+192<br>-+124 | -•227<br>-•087 | 158<br>078     | 157<br>112       | 414<br>360   |
| ∙750<br>•850      | •001           | 063<br>.031    | -BUZ4<br>-047  | 015                            | 234            | 007            | •035           | •011           | 052              | 319          |
| •900              | .043           | •081           | 079            | 031                            | 190            | •047           | 090            | •064           | 011              | 283          |
| •                 |                |                |                |                                | Right          | side           |                |                |                  |              |
| ●025              | 331            | •031           | •348           | •616                           | •946           | 921            | 028            | •377           | •610             | •771         |
| •075              | 398            | 086            | •161           | • 371                          | •580           | 554            | 110            | •181<br>•080   | •383             | •566<br>•414 |
| •150<br>•250      | 344            | 120<br>106     | •068<br>•032   | •241<br>•163                   | •416<br>•307   | 327<br>260     | -•126<br>-•151 | •008           | •250<br>•151     | 294          |
| • 350<br>• 350    | 200            | 139            | 032            | •074                           | •194           | 258            | 200            | 062            | •066             | 199          |
| 450               | 195            | 182            | 099            | 011                            | •094           | 239            | 235            | 134            | 032              | .082         |
| •550              | 141            | <b>-•16</b> 5  | 111            | 042                            | •045           | 219            | -•2 <b>6</b> 8 | 181            | 086              | .016         |
| •650              | 082            | 124            | 100            | 056                            | •004           | - 6144         | 207            | 179            | 112              | 035          |
| •750              | -•020          | 051            | 071            | 063                            | 031            | ~•055          | 066            | 110            | 102              | 064          |
| .850<br>.900      | •060<br>•087   | •043<br>•081   | •013<br>•043   | 003<br>.016                    | -•017<br>-•044 | •035           | •057<br>•086   | ●007<br>●035   | 038<br>020       | 070<br>110   |
| • 900             |                |                | $b_{v} = 0$    |                                |                | 1              |                | v = 0.93       |                  |              |
|                   |                |                |                |                                | Left           | side           |                |                |                  |              |
| •000              | •567           | .812           | •629           | 261                            | 117            | •781           | .884           | •687           | •313             | 171          |
| 025               | •399           | 066            | -1.067         | 874                            | 594            | <b>♦458</b>    | 215            | 895            | 493              | 609          |
| •075              | •222           | 114            | 855            | 821                            | 598            | •186           | 427            | 400            | 288              | 394          |
| •150              | •103           | 157            | 305            | 750                            | 609            | 059            | 484            | 328            | 283              | 371          |
| •250              | 104            | 210            | -•245<br>- 279 | 588<br>422                     | 605<br>580     | 157            | 448            | 321            | 281              | 374          |
| ●350<br>●450      | 215            | -•322<br>-•416 | -•278<br>-•305 | 305                            | 544            |                |                |                |                  |              |
| 550               | 303            | 432            | 268            | 222                            | 454            | 1              |                |                |                  |              |
| •650              | 326            | 371            | 212            | 226                            | 426            | 539            | 183            | 287            | 308              | 410          |
| •750              | -•205          | 054            | 155            | <b>~</b> •260                  | 424            | 142            | 058            | 283            | 321              | 404          |
| •850              | 037            | •040           | 104            | -•281                          | 415            | 066            | •039           | -•250<br>-•229 | 313              | 386          |
| •900              | 010            | •078           | 072            | 284                            | Righ           | 1 side         | •081           | -0229          | 311              | 370          |
| •025              | -1.047         | 009            | •434           | •651                           | 782            | -•953          | -+093          | •505           | • 796            | 977          |
| •075              | 787            | 097            | 225            | •430                           | •600           | 317            | 406            | •171           | 459              | •683         |
| •150              | 272            | 120            | .124           | •304                           | . 464          | 313            | 413            | 032            | •215             | • 423        |
| •250              | -•259          | 195            | •011           | •181                           | •337           |                |                |                |                  |              |
| •350              | 289            | -•297          | 092            | •054                           | •206           |                |                |                |                  |              |
| • 450<br>• 550    | -•302<br>-•264 | -•377<br>-•410 | 201<br>287     | -•062<br>-•165                 | •079<br>-•034  | 1              |                |                |                  |              |
| •650              | 199            | -•410<br>-•343 | 324            | <b>-</b> €105<br><b>-</b> €224 | 121            | 181            | 183            | 317            | 411              | 297          |
| •750              | 146            | 077            | 236            | 265                            | 174            | 270            | 051            | 158            | 264              | 264          |
| 850               | 063            | •066           | <b>-</b> •025  | 103                            | 135            | 239            | .062           | 062            | 149              | 202          |
| •900              | 033            | •109           | •004           | 100                            | 165            | -•211          | •105           | 055            | 158              | 228          |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (j)  $\alpha = 0^\circ$ ; M = 0.92

| Γ                     | <del>7</del>   |                |                     |                | , - O , IVI -         | <del></del> -   |                       |                       |                |                |
|-----------------------|----------------|----------------|---------------------|----------------|-----------------------|-----------------|-----------------------|-----------------------|----------------|----------------|
|                       |                |                |                     | for-           |                       | L.              | (                     | Cp for                | _              |                |
| x C                   | B=-3.9°        | /              |                     | B=7.90         | B=12.70               | B=-3.90         | B=0°                  | B=39°                 | B=7.9°         | B=12.7°        |
| \ C <sub>v</sub>      |                | 2/1            | by =0.7             | '/             |                       | 1               | 2/                    | <del>!</del>          | 8              | 12.7           |
|                       |                |                |                     |                | Left s                | ide             |                       | -, 0.0                |                | <del></del>    |
| •000                  | 788            | .404           |                     |                |                       | 1               |                       |                       |                |                |
| • 025                 | 298            | -694<br>-040   | •660<br>-•448       | •452<br>-•968  | •076<br><b>-•90</b> 8 | •62 <sup></sup> | •813<br><b>-•</b> 060 | •681<br><b>-</b> •958 | •368<br>-1•279 | -•074<br>-•523 |
| •075                  | •167           | 084            | 377                 | 746            | 726                   | •17:            | 123                   | 669                   | -1.162         | <b>5</b> 31    |
| •150<br>•250          | •061           | 140<br>107     | 351<br>224          | -•636          | 637                   | •07€            | 144                   | -•386                 | -1.063         | 544            |
| 350                   | -032           | 197<br>140     | 200                 | -•512<br>-•270 | -•513<br>-•452        | •00!            | 157                   | -•265                 | 569            | 552            |
| • 450                 | 107            | 191            | 208                 | 166            | -:452<br>-:451        | 075<br>155      | -•231<br>-•299        | -•293<br>-•286        | 143<br>199     | 541            |
| • 550                 | 117            | 186            | 156                 | 126            | 410                   | 204             | 324                   | 249                   | 179            | 502<br>451     |
| •650                  | 142            | 172            | 105                 | 106            | 366                   | 237             | 302                   | 159                   | 160            | - 405          |
| •750<br>•850          | 119            | ~•076          | 029                 | 065            | 312                   | 200             | -•099                 | 076                   | 126            | 368            |
| 900                   | -•029<br>•025  | •028<br>•074   | •045<br>•079        | 009            | 244                   | 050             | •037                  | •014                  | 065            | 320            |
|                       | •027           | - 10/7         | •017                | •022           | 206                   | 024             | •093                  | •067                  | 029            | 285            |
|                       | <b> </b>       |                |                     |                | Right                 | side            |                       |                       |                |                |
| •025<br>•075          | 319            | •035           | • 354               | •617           | .845                  | 895             | 023                   | •381                  | +613           | •778           |
| •150                  | 407<br>369     | 085<br>120     | •162<br>•072        | •373           | •586                  | 636             | 107                   | •179                  | .385           | .567           |
| •250                  | 242            | 109            | •032                | •242<br>•168   | •422<br>•313          | 372             | 123                   | •087                  | •254           | ø418           |
| •350                  | 216            | 147            | 034                 | •076           | •204                  | -•254<br>-•265  | -•147<br>-•198        | •013<br><b>-•06</b> 1 | •151           | 6301           |
| <ul><li>450</li></ul> | 207            | 191            | 100                 | 014            | •098                  | 246             | -•249                 | 132                   | •056<br>-•037  | •203           |
| •550                  | <b>~.153</b>   | 189            | 117                 | 047            | •051                  | 237             | 296                   | 185                   | -•097          | •093<br>•018   |
| •650                  | 092            | 151            | 116                 | 074            | 001                   | 153             | 271                   | 198                   | 135            | - 034          |
| •750<br>•850          | 024            | 069            | 095                 | 094            | -•039                 | 063             | 080                   | 141                   | 141            | 075            |
| •900                  | ●051<br>——●082 | •040<br>•074   | •004<br>•034        | 034            | 030                   | •026            | •053                  | 012                   | 091            | -•089          |
| 1                     |                |                | $\frac{5}{v} = 0.6$ | -•017<br>56    | 062                   | •062            | 2.6                   | •029                  | 064            | 133            |
|                       |                |                | V - U.C             |                |                       |                 | 2/0 <sub>V</sub>      | <i>=0.93</i>          |                |                |
|                       |                |                |                     |                | Left                  | s ide           |                       |                       |                |                |
| •000                  | <b>≥584</b>    | .821           | .640                | ●305           | 081                   | •8 <b>0</b> 1   | .894                  | •701                  | •359           | 131            |
| •025                  | •402           | 056            | -1.075              | -1.122         | -•579                 | .466            | 197                   | 950                   | 483            | - 611          |
| ●075<br>●150          | •228<br>•111   | 107            | 864                 | -1.018         | 582                   | •196            | <b></b> 399           | -•403                 | 285            | 389            |
| •250                  | •010           | 147<br>198     | 287<br>233          | <b>-</b> ∙839  | 594                   | 049             | 479                   | 449                   | 281            | 362            |
| •350                  | 099            | 311            | -•293               | 542<br>372     | 591<br>581            | 149             | -• 463                | -•391                 | 284            | 367            |
| • 450                 | 217            | 420            | 352                 | 285            | 552                   |                 |                       |                       |                |                |
| •550                  | 308            | 484            | 271                 | <b>-</b> •217  | 450                   |                 |                       |                       |                | I              |
| •650                  | 387            | 449            | 210                 | 239            | 418                   | 642             | 216                   | 274                   | 307            | - • 403        |
| •750<br>•850          | -•368<br>-•082 | 052            | 150                 | -•270          | 412                   | <b>-</b> •378   | 123                   | 262                   | 315            | - 401          |
| 900                   | 020            | ∙049<br>•085   | 095<br>065          | 288<br>296     | -+405                 | 116             | 026                   | 235                   | 305            | 384            |
| ''''                  |                | • 000          |                     | -1246          | Piah4                 | 079             | •019                  | 210                   | 305            | 374            |
| 1                     |                |                |                     |                | Right                 | <u> 5/0e</u> _  |                       |                       |                |                |
| •025<br>•075          | -1.026<br>810  | ~•002<br>-•090 | • <b>439</b>        | •652           | •789                  | 939             | 068                   | •522                  | .801           | 980            |
| 150                   | 231            | 109            | •228<br>•130        | • 429<br>• 309 | •604                  | <b>-</b> •287   | 377                   | 184                   | •460           | •687           |
| •250                  | 242            | 193            | •018                | •185           | •469<br>•343          | -•285           | -•417                 | 026                   | •213           | •427           |
| •350                  | 266            | 295            | 090                 | •058           | •211                  |                 |                       |                       |                | [              |
| • 450                 | 303            | 388            | 203                 | 061            | .080                  |                 |                       |                       |                |                |
| •550                  | -•262          | 437            | 285                 | 170            | 033                   |                 |                       |                       |                |                |
| •650<br>•750          | -•200<br>-•157 | 445<br>082     | 347                 | <b>-</b> •239  | 125                   | 283             | 249                   | 513                   | 527            | 382            |
| 850                   | -•157<br>-•087 | •066           | 329<br>040          | 322<br>233     | 218                   | -6274           | 164                   | ~•248                 | 510            | 340            |
| 900                   | 051            | •110           | •005                | 167            | 164<br>195            | -•246<br>-•215  | 036                   | 067                   | -•266          | - 239          |
|                       |                |                |                     | 1101           | 9 . 7 .               | -0215           | •027                  | ~.046                 | 173            | - 261          |

TABLE III. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (k)  $\alpha = 9.4^\circ$ ; M = 0.60

|                           |              |            |                | for-           |                       |               |              | Cp for       |                |              |
|---------------------------|--------------|------------|----------------|----------------|-----------------------|---------------|--------------|--------------|----------------|--------------|
| x                         | B=-3.9°      | B=0°       | B=3.9°         | B=7.9°         | B=12.7°               | B=-3.9°       | B=0°         | B=3.9°       | B=79°          | B=12.7°      |
| <u>x</u> - C <sub>v</sub> |              | Z/.        | by = 0.1       | /              | *                     |               | Z/           | by = 0.      | 38             |              |
|                           |              |            |                |                | Left s                | ide           |              |              |                |              |
| •000                      | •412         | •795       | •434           | 723            | -1.227                | •143          | •689         | •130         | 757            | -1.197       |
| •025                      | -•011        | 124        | 240            | 711            | -1.957                | •353          | 082          | 749          | -1.276         | 950<br>932   |
| •075                      | •034         | 122        | 321<br>312     | 521<br>426     | -1.114<br>625         | •180<br>•087  | 115<br>122   | 465<br>339   | -1.170<br>841  | - 886        |
| •150<br>•250              | •000<br>•003 | 145<br>093 | -•312<br>-•226 | -,420<br>-,299 | -•625<br>-•411        | •037          | -4127        | <b>283</b>   | 351            | 835          |
| 350                       | 020          | 104        | 211            | - 253          | 344                   | 011           | 142          | 271          | 287            | 708          |
| 450                       | 038          | 115        | 202            | 231            | 335                   | 050           | 158          | 249          | 276            | 565          |
| •550                      | 029          | 095        | 161            | 190            | 277                   | 041           | 127          | 195          | 231            | 457          |
| •650                      | 016          | 062        | ~.116          | 165            | 215                   | 027           | -•091        | 141          | 192            | 379          |
| ●750                      | •007         | 023        | 064            | 095            | 162                   | 004           | 037          | 073          | 129            | 319          |
| •850                      | •037         | •028       | 001<br>.033    | -•027<br>•003  | 095<br>049            | •041<br>•062  | ∙026<br>•058 | •010<br>•046 | -•047<br>-•002 | 236<br>183   |
| •900                      | ●05.7        | •058       | •033           | \$ O O 3       | Right                 | side          | •000         | •040         |                | - 103        |
| •025                      | 172          | 039        | •015           | •513           | •794                  | 677           | 046          | • 402        | •606           | •718         |
| 075                       | 316          | 127        | .026           | 332            | 536                   | 438           | -104         | •195         | •393           | •545         |
| •150                      | 295          | 131        | •010           | •232           | •388                  | 334           | 111          | •100         | • 264          | •409         |
| • 250                     | 227          | 086        | •001           | •171           | • 294                 | 268           | 118          | .046         | •166           | •303         |
| • 350                     | 213          | 107        | 019            | •084           | •190                  | 247           | 129          | •006         | •112           | •220         |
| • 450                     | 202          | 122        | 044            | •039           | •112                  | 229           | 140<br>115   | 026<br>042   | •053<br>•023   | •140<br>•089 |
| •550<br>•650              | 150<br>104   | 089<br>062 | 026<br>008     | •023<br>•021   | ∙080<br>•059          | 184<br>127    | 084          | 012          | •019           | •061         |
| 750                       | 054          | 021        | •015           | •02B           | •047                  | 054           | 021          | •015         | 028            | .041         |
| 850                       | 016          | •040       | 055            | •057           | •059                  | •030          | • 0 46       | .064         | .059           | .043         |
| 900                       | •043         | 062        | .064           | .066           | •054                  | •053          | •060         | .064         | •057           | •011         |
|                           |              | Z/         | by = 0.        | 66             |                       |               | Z/b          | v =0.93      | 7              |              |
|                           |              |            |                |                | Left                  | s ide         |              |              |                |              |
| •000                      | •003         | •660       | 042            | 453            | 874                   | +407          | •810         | 213          | 308            | 824          |
| •025                      | •418         | 084        | -1.057         | 766            | 609                   | ●587          | 174          | -1.199       | 464            | 441          |
| •075                      | .246         | 104        | 551            | 736            | 612                   | •339          | 181          | -1.017       | 478            | 413          |
| •150                      | •148         | 111        | 395            | 666            | <b></b> 595           | •139          | 203<br>167   | 859<br>515   | 471<br>464     | 423<br>432   |
| •250                      | •082         | 122        | 328<br>303     | 557<br>467     | -•565<br>-•542        | •053          | 10/          | 515          |                | 52           |
| •350<br>•450              | -021         | 147<br>163 | 280            | 405            | 515                   |               |              |              |                |              |
| •550                      | 054          | 151        | 238            | 369            | 496                   |               |              |              |                |              |
| .650                      | 036          | 107        | 168            | 335            | 469                   | 075           | 131          | 161          | 378            | 402          |
| •750                      | 004          | 046        | 089            | -•285          | 446                   | 025           | 053          | 069          | 331            | 379          |
| <b>.</b> 850              | •021         | •010       | 017            | 219            | 411                   | •018          | •019         | 001          | -•276<br>-•249 | 349          |
| •900                      | •041         | •037       | •024           | 190            | 397                   | •046          | •058         | •042         |                | 330          |
|                           |              | 410        | •443           | 4620           | *704                  | <i>t side</i> | 071          | •679         | •855           | •997         |
| ●025<br>●075              | 945<br>500   | 019<br>075 | • <b>44</b> 3  | •440           | •580                  | -1968         | 124          | 350          | -545           | 739          |
| 150                       | 350          | 082        | 166            | 320            | • 462                 | 838           | +.115        | •195         | •357           | •527         |
| • 250                     | 311          | 107        | •096           | .230           | •368                  | 1             |              |              |                |              |
| • 350                     | 297          | -•129      | •033           | •143           | •259                  |               |              |              |                |              |
| <b>♦</b> 450              | 263          | 145        | 012            | •078           | •170                  |               |              |              |                |              |
| •550                      | 218          | 140        | 033            | •023           | •091                  | 116           | 004          | m = 021      | 029            | 033          |
| 650                       | 150          | 100<br>041 | 024<br>.003    | 002<br>002     | •031<br><b>-</b> •015 | 116           | 086<br>039   | 021<br>010   | 029            | 114          |
| ●750<br>●850              | •018         | •040       | •060           | •021           | -•015<br>-•052        | 028           | •042         | •048         | 056            | 146          |
| 900                       | •055         | .064       | .069           | 007            | 086                   | •055          | •062         | •060         | 083            | 181          |
| .,,,,,                    | 1            |            | ,              | ••••           |                       | 1             |              |              |                |              |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued

(1)  $\alpha = 9.6^{\circ}$ ; M = 0.80

|                   | 1              |                      | Cp                     | for-           |                |                |                               | Cp for               | _             |                |
|-------------------|----------------|----------------------|------------------------|----------------|----------------|----------------|-------------------------------|----------------------|---------------|----------------|
| ×                 | B=-3.9         | B=0°                 | B=3.9°                 | B=7.90         | B=12.70        | B=-3.9°        | B=0°                          | B=3.9°               | B=7.9°        | B=12.7°        |
| $\frac{x}{C_{v}}$ | <u> </u>       | Z                    | by = 0.1               | 1              | 1'             |                | 2/                            | $b_V = O.$           | 38            |                |
| "                 |                |                      | -,                     |                | Left s         | ide            |                               | ·                    |               |                |
| <u> </u>          | <del> </del>   |                      |                        |                |                | 1              |                               |                      |               |                |
| •000<br>•025      | -026           | -864<br>102          | •433<br>••153          | 404<br>566     | 214<br>-1.347  | •417<br>•360   | •740<br>••076                 | •433<br>-•983        | 133<br>-1.143 | -•707<br>-•779 |
| ♦075              | 038            | 117                  | 313                    | 519            | -1.009         | ●187           | ··•120                        | 488                  | -1.078        | 793            |
| •150              | •009           | 154                  | 351                    | 457            | 719            | •102           | ••120                         | 354                  | 898           | 759            |
| • 25C<br>• 350    | -006           | 099<br>106           | 244<br>224             | -•315<br>-•263 | -•467<br>-•382 | -0022          | ··•130                        | 294<br>293           | 514<br>316    | 719<br>651     |
| •450              | 047            | -•100<br>-•132       | 221                    | 238            | -•343          | 061            | ~•183                         | 279                  | 260           | 561            |
| •550              | 041            | 108                  | 179                    | <b></b> 196    | ~•296          | 061            | 153                           | 223                  | 229           | 472            |
| •650              | -•032          | ~•078                | 133                    | 171            | 244            | 049            | ~•117                         | 160                  | 206           | 412            |
| •750<br>•850      | -•006<br>•039  | ~•034<br>•032        | -0070<br>-000          | 125<br>045     | 189<br>118     | 015<br>.042    | ~•046<br>•035                 | -•075<br>•017        | 163<br>084    | 355<br>287     |
| 900               | 067            | •068                 | •038                   | 010            | 069            | 076            | •080                          | •062                 | 032           | - 230          |
|                   |                |                      |                        |                | Right          | side           | ,                             |                      |               |                |
| .025              | 092            | 007                  | •001                   | • 425          | .800           | -1.070         | ··•028                        | •411                 | •622          | •747           |
| •025<br>•075      | 325            | <b>-</b> •117        | •047                   | •334           | ·548           | 444            | ~•097                         | •207                 | •409          | •571           |
| •150              | 337            | 126                  | •030                   | •246           | •399           | 345            | ··• 106                       | •117                 | •285          | • 436          |
| •250              | -+249          | 084                  | •010<br>••020          | •189<br>•109   | •306<br>•201   | -•288<br>-•276 | ··•120                        | •05 <b>6</b><br>•010 | •193<br>•126  | •327<br>•243   |
| • 350<br>• 450    | -•237<br>-•235 | 106<br>133           | 044                    | •033           | •112           | 273            | 159                           | 037                  | •051          | 154            |
| •550              | 180            | 102                  | 034                    | •020           | •088           | 226            | 148                           | 051                  | •011          | •092           |
| <b>♦650</b>       | 124            | 064                  | 019                    | •002           | •052           | 151            | 111                           | 034                  | 004           | •055           |
| • 750             | 067            | 025                  | •007                   | •008           | •038           | 058            | 031                           | •001                 | •004          | •032           |
| •850              | •013           | •047<br>•070 _       | •056<br>•068           | •045<br>•050   | •048<br>•034   | •033           | •052<br>•068                  | •062<br>•073         | •033<br>•023  | •015<br>••018  |
| •900              | •047           | Z/                   | /by = 0.               | 66             | 4034           | 1              | Z/b                           | , = 0.93             |               |                |
|                   |                |                      |                        |                | Left           | s ide          |                               |                      |               |                |
| 200               | 205            | 704                  | 200                    | 076            | _ 454          | .441           | . 074                         | •367                 | •063          | 587            |
| •000              | •305<br>•427   | •706<br>~•085        | •300<br><b>-</b> 1•090 | 075<br>633     | 654<br>555     | •661           | •8 <b>76</b><br>••22 <b>8</b> | -a941                | 353           | 392            |
| 075               | 259            | -•097                | ~•651                  | ~:667          | 571            | 326            | - 246                         | 744                  | 375           | - 393          |
| •150              | •163           | 114                  | 394                    | 641            | 558            | •116           | 264                           | 660                  | 416           | 395            |
| •250              | •093           | 132                  | 330                    | 525            | 551            | •029           | 210                           | 605                  | 407           | 402            |
| •350              | •021           | 177                  | 336<br>328             | 378<br>355     | 518<br>488     |                |                               |                      |               |                |
| •450<br>•550      | -•047<br>-•089 | -•214<br>-•207       | ~•276                  | 364            | -•488<br>-•464 |                |                               |                      |               |                |
| •650              | 070            | 150                  | 189                    | 364            | 447            | 116            | 148                           | 206                  | 370           | 395            |
| •750              | 025            | 060                  | 098                    | 343            | -•435          | 052            | ••037                         | 147                  | 352           | -,373          |
| 900               | •021           | •014                 | 014<br>.026            | 294            | 395            | •007<br>•038   | •050<br>•089                  | 075                  | 312           | 343            |
| •900              | •052           | •053                 | •U26                   | 266            | Right          |                | 1089                          | 044                  | 290           | 324            |
|                   | <del></del>    |                      |                        |                |                |                |                               |                      |               |                |
| •025<br>•075      | -1.035<br>543  | •005<br><b>-•066</b> | •472<br>•276           | •650<br>•469   | •759<br>•630   | 900<br>804     | ·•085                         | •669<br>•350         | ∙886<br>•570  | 1.063<br>.791  |
| •150              | 352            | 069                  | •186                   | • 354          | •518           | 801            | 141                           | •181                 | •376          | 573            |
| •250              | 349            | 114                  | .110                   | •256           | •413           |                |                               |                      |               |                |
| • 350             | 366            | 157                  | •035                   | •158           | •301           |                |                               |                      |               |                |
| • 450             | ~.343          | 187                  | 032<br>073             | <b>♦</b> 069   | •194           |                |                               |                      |               |                |
| .550<br>.650      | 273<br>180     | 187<br>141           | 072<br>060             | -•001<br>-•039 | •100<br>•031   | 139            | 091                           | 061                  | 078           | ~•035          |
| .750              | 083            | 052                  | 020                    | 052            | 032            | 072            | .033                          | 041                  | 120           | 143            |
| ●850              | ●024           | •047                 | .050                   | 030            | 065            | 003            | .062                          | •020                 | 114           | 197            |
| • 900             | •070           | •085                 | •071                   | 048            | 118            | •036           | •098                          | •027                 | 128           | 247            |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  = 0° - Continued (m)  $\alpha$  = 9.7°; M = 0.85

|                   |                   |                | Cp             | for-                                    |         |              |                | Cp for         | -            |               |
|-------------------|-------------------|----------------|----------------|---|---------|--------------|----------------|----------------|--------------|---------------|
| х                 | B=-3.9            | \$ =0°         | B=39°          | B=7.9°                                  | B=12.7° | B=-3.9°      | B=0°           | B=3.9°         | 17           | B=127°        |
| $\frac{x}{C_{v}}$ |                   | Z              | by = 0.1       | 1                                       |         |              | Z              | $b_V = O$ .    | 38           |               |
| - <b>v</b>        |                   |                | - <del> </del> |   | Left s  | ide          |                |                |              |               |
| •000              | •368              | •881           | 094            | 292                                     |         | •487         | •751<br>-•091  | •508           | -1.220       |               |
| •025              | 046               | -099           | 094<br>297     | 515<br>524                              |         | •350<br>•183 | 091<br>130     | -1.149<br>442  | -1.220       |               |
| •075<br>•150      | •035              | 122<br>167     | 362            | 505                                     |         | 096          | 130            | 345            | 834          |               |
| • 250             | •006              | 112            | 242            | -1328                                   |         | •038         | 140            | 287            | 549          |               |
| .350              | 029               | 122            | 220            | 272                                     |         | 031          | 179            | 280            | 345          |               |
| • 450             | -•059             | 147            | 223            | 245                                     |         | 080          | 213            | 274            | 268          |               |
| • 550             | -•052             | 127            | 173            | 200                                     |         | 080          | 184            | 222            | 233          |               |
| •650              | 048               | 101            | 134            | 176                                     |         | 076<br>038   | 143<br>065     | 162<br>085     | 216<br>180   |               |
| •750<br>•850      | -•019<br>•036     | -•049<br>•029  | 075<br>.001    | 140<br>066                              |         | •032         | •027           | •010           | 109          |               |
| <b>4900</b>       | •062              | •067           | •044           | 022                                     |         | 066          | 077            | •062           | 063          |               |
| • 700             | 1002              |                |                | • | Right   | side         |                |                |              |               |
| •025              | 041               | 004            | 019            | • 362<br>• 318                          |         | -1.023       | 021            | • ♦ 03         | 4624         |               |
| •075              | 313               | 119            | •048           |   |         | 422          | 092            | •204           | •411         |               |
| •150              | 341               | 123            | •034           | • 246                                   |         | 330          | 106<br>122     | •118<br>•058   | •285<br>•192 |               |
| •250<br>250       | 244               | 089            | •011           | •189<br>•112                            |         | 273<br>268   | ~•147          | •010           | •123         |               |
| •350<br>•450      | -•234<br>-•236    | ~•116<br>~•147 | 021<br>053     | •033                                    |         | 268          | 173            | -•048          | •046         |               |
| •550              | 182               | ~•113          | 044            | 016                                     |         | 229          | 170            | 067            | •003         |               |
| •650              | 123               | 084            | 031            | 010                                     |         | 155          | 126            | 057            | 020          |               |
| •750              | 073               | 042            | 007            | 007                                     |         | 063          | 040            | 019            | 019          |               |
| .850              | •015              | •038           | •052           | •031                                    |         | •029         | •051           | •050           | •011         |               |
| •900              | •044              | •070           | •065           | •037                                    |         | •066         | •073           | •062           | -•007        |               |
|                   |                   | Z,             | $b_v = 0$      | .66                                     |         | 1            | 2/0            | v = 0.93       |              | <del></del> - |
|                   |                   |                |                |   | Left    | side         |                |                |              |               |
| • 000             | •377              | •729           | •383           | 019                                     |         | •734         | •899           | •489<br>- 021  | •140         |               |
| •025              | •417              | 086            | -1.144         | 647                                     |         | •593<br>•308 | -•286<br>-•282 | 831<br>591     | 339<br>356   |               |
| •075              | •257              | 103<br>125     | 619<br>372     | 678<br>658                              |         | •095         | -•299          | <b>490</b>     | 405          |               |
| •150<br>•250      | •16Q<br>•085      | 147            | -4300          | <b>-</b> .532                           |         | •015         | 230            | 469            | 395          |               |
| •350<br>•350      | 4009              | 208            | 306            | 362                                     |         |              | ••             |                |              |               |
| .450              | 072               | 247            | 311            | 348                                     |         | 1            |                |                |              |               |
| .550              | 122               | 244            | 273            | 371                                     |         | 1            |                |                |              |               |
| •650              | 107               | 170            | 200            | 379                                     |         | 170          | 154            | 266            | -•371        |               |
| •750              | 058               | 066            | 122            | 369                                     |         | 096          | -•035<br>•060  | 227<br>172     | 356<br>322   |               |
| <b>850</b>        | 001               | •020           | 047<br>006     | 333<br>303                              |         | 038<br>012   | •060           | -•172<br>-•139 | 303          |               |
| •900              | •025              | •061           | 008            |   | Piah    | t side       | •077           |                |              |               |
| •025              | 1 106             | •021           | •473           | •657                                    | RIGII   | 7 570E       | ~.085          | 4659           | 4884         |               |
| •075              | -1 • 196<br>-•454 | 055            | 277            | •469                                    |         | 586          | 085<br>190     | •659<br>•337   | •894<br>•572 |               |
| 150               | 314               | 062            | .190           | • 359                                   |         | 560          | 150            | •173           | •370         |               |
| • 250             | 301               | 112            | •108           | • 266                                   |         |              |                |                |              |               |
| • 350             | 331               | 173            | •024           | •153                                    |         |              |                |                |              |               |
| • 450             | 331               | 211            | 051<br>104     | •057<br><b>-</b> •023                   |         |              |                |                |              |               |
| .550<br>.650      | -•276<br>-•192    | -•221<br>-•160 | 104            | 062<br>062                              |         | 240          | <b></b> 102    | 101            | 116          |               |
| •750              | 107               | 061            | 057            | 082                                     |         | 196          | 034            | 084            | 159          |               |
| .850              | 004               | •050           | 027            | 063                                     |         | 135          | .070           | 024            | 142          |               |
| •900              | .044              | •087           | .052           | 084                                     |         | 086          | •105           | 019            | 170          |               |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  =  $0^{\circ}$  - Continued

(n)  $\alpha = 9.7^{\circ}$ ; M = 0.90

|              |                |                | Cp 1          | or-            | -       |              |                | Cp for       | _              |         |
|--------------|----------------|----------------|---------------|----------------|---------|--------------|----------------|--------------|----------------|---------|
| x            | B = - 3.99     | B=0°           | B=39°         | B=7.9°         | B=12.70 | B=-3.9°      | B=0°           | B=3.9°       |                | B=12.7° |
| X   Cy       |                | Z/             | by = 0.1      | /              | *       |              | 2/             | by = 0.3     | 38             |         |
|              |                |                |               |                | Left s  | ide          |                |              |                |         |
| •000         | •323           | •927           | •424          | 203            |         | •549         | - <del></del>  | •572         | •144           |         |
| •025         | 069            | ~•077          | 029           | 443            |         | •353         | 081            | -1.046       | -1.302         |         |
| •075<br>•150 | •039<br>•015   | -•106<br>-•165 | 256<br>405    | 482<br>558     |         | •183<br>•098 | 129<br>137     | 561<br>385   | -1.023<br>814  |         |
| 250          | 005            | 118            | 260           | 365            |         | •031         | 153            | 269          | 535            |         |
| 350          | 033            | 133            | 226           | 294            |         | 039          | 203            | 280          | 366            |         |
| • 450        | 070            | 186            | 242           | 262            |         | 102          | 258            | 293          | 276            |         |
| •550         | 073            | 168            | 195           | 208            |         | 122          | -•2 <b>56</b>  | 246          | - • 235        |         |
| •650         | -•082<br>-•057 | -•156<br>-•097 | 151<br>091    | 184<br>146     |         | 131<br>094   | -•221<br>-•116 | 180<br>102   | 227<br>200     |         |
| ●750<br>●850 | 001            | 001            | 013           | 090            |         | 015          | •006           | 005          | 141            |         |
| 900          | •034           | •040           | .031          | 046            |         | •031         | •059           | .046         | 097            |         |
|              |                |                | •             |                | Right   | side         |                |              |                |         |
| .025         | •054           | •022           | 029           | €356           |         | 935          | 017            | •407         | •624           |         |
| •075         | 265            | 113            | •054          | •327           |         | 531          | -•097          | •211         | •413           |         |
| •150         | 383            | 134            | •043          | <b>∗</b> 258   |         | 357          | -•112<br>-•132 | 120          | •292           |         |
| •250<br>•350 | 261<br>243     | 098<br>134     | .016<br>020   | •199<br>•118   |         | 266<br>273   | -•132<br>-•171 | ∙054<br>•003 | •201<br>•131   |         |
| 450          | -0259          | 179            | 056           | •029           |         | - 290        | 217            | 059          | •044           |         |
| +550         | 206            | 161            | 056           | •010           |         | 265          | 226            | 097          | 008            |         |
| •650         | 150            | 136            | 056           | 022            |         | 182          | 195            | 099          | 039            |         |
| •750         | 094            | 087            | 035           | -+031          |         | 087          | 104            | ~•059        | 051            |         |
| •850<br>•900 | -•007<br>•031  | •011<br>•046   | •026<br>•046  | .009<br>.006   |         | ●007<br>●045 | •030<br>•051   | •014<br>•032 | 023<br>042     |         |
| • 900        | 1031           |                | $b_{\nu} = 0$ |                |         | 1 3379       |                | ,=0.93       | 1072           |         |
|              |                |                | Dy - U.       | 00             | Left    | 0 100        |                | ,-0.93       |                |         |
| ļ            |                |                |               |                | Leii    |              |                |              |                |         |
| •000         | •447           | •735           | •454          | •057           |         | •794         | • 923          | •586         | •221           |         |
| •025         | •415<br>•258   | -•085<br>-•099 | -1.174<br>969 | -•719<br>-•739 |         | •586<br>•301 | -•274<br>-•344 | 755<br>501   | 334<br>338     |         |
| •075<br>•150 | 163            | 125            | 235           | <b>-</b> •675  |         | 079          | 343            | -408         | 394            |         |
| 250          | •082           | 167            | 265           | 537            |         | 001          | 239            | 389          | 378            |         |
| • 350        | 013            | 249            | 293           | 325            |         |              |                | _            |                |         |
| • 450        | 114            | 311            | 313           | 338            |         | 1            |                |              |                |         |
| •550         | -•197<br>-•210 | ~.383          | 283<br>219    | 362<br>376     |         | 387          | 159            | 289          | 354            |         |
| •650<br>•750 | 155            | -•285<br>-•094 | 157           | 378            |         | 157          | 040            | 289<br>273   | 345            |         |
| 850          | 066            | •004           | 094           | -•357          |         | 103          | •047           | 235          | 323            |         |
| 900          | 037            | •051           | 060           | 337            |         | 085          | .081           | 213          | 313            |         |
|              |                | • •            |               |                | Right   | side         |                |              |                |         |
| •025         | -1.103         | •020           | •475          | •667           |         | 541<br>439   | 101            | •656         | •904           |         |
| •075         | 802            | 058            | •283          | • 484          |         |              | <b>~•264</b>   | •339         | •588           |         |
| •150<br>•250 | -•238<br>-•259 | 070<br>132     | •197<br>•109  | •370<br>•278   |         | -•413        | <b></b> 172    | •163         | •376           |         |
| 350          | 311            | -•132<br>-•202 | •014          | 163            |         | 1            |                |              |                |         |
| 450          | 337            | 276            | 079           | .052           |         |              |                |              |                |         |
| •550         | 287            | -4315          | 156           | 042            |         | 1            |                |              |                |         |
| •650         | -•211          | 295            | 178           | 098            |         | 274          | 156            | 198          | 152            |         |
| •750         | 153            | 105            | 133           | 133            |         | 2.57         | 051            | 148          | 205            |         |
| •850<br>•800 | 059            | •040           | 027<br>004    | 104            |         | 210<br>177   | •053<br>•090   | 083<br>083   | -•197<br>-•231 |         |
| •900         | 019            | •077           | -8004         | 136            |         |              | 8070           |              | -1231          |         |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (o)  $\alpha=9.7^\circ$ ; M=0.92

|                   |                |                | Cp            | for-           |         | <u> </u>      |              | Cp for .       |                |         |
|-------------------|----------------|----------------|---------------|----------------|---------|---------------|--------------|----------------|----------------|---------|
| x                 | B=-3.9         | B=0°           | B=3.9         | B=7.9°         | B=12.7° | B=-3.9°       | B=0°         | B=3.9°         | B=7.9°         | B=12.7° |
| $\frac{x}{c_{v}}$ |                | Z/             | by = 0.       | <i>ii</i>      | •       |               | Z/           | by = 0.3       | <i>38</i>      |         |
| ·                 |                |                |               |                | Left s  | ide           |              |                |                |         |
| •000              | 337            | •980           | •292          | • 448          |         | •179          | •749         | •559           | •590           |         |
| •025              | 358            | 050            | 038           | .039           |         | -1.279        | -•052        | •368           | 963            |         |
| •075              | 392            | 075            | •056          | 162            |         | -1.027        | ~•099        | •199           | 403<br>324     |         |
| • 150             | 484            | 140            | •052          | 316<br>220     |         | 725           | 105<br>126   | •114<br>•049   | 262            |         |
| •250<br>•350      | 384<br>288     | -•095<br>-•117 | •033<br>••003 | 212            |         | 341           | 183          | 019            | 271            |         |
| • 450             | 263            | 171            | 048           | 235            |         | - 279         | 239          | 093            | 298            |         |
| •550              | 218            | 165            | 068           | 196            |         | 252           | 245          | <b>1</b> 19    | -•254          |         |
| 650               | 201            | 159            | 085           | 167            |         | 245           | 228          | 137            | 194            |         |
| •750              | 171            | 096            | -:068         | 108            |         | 230           | 119          | 111            | 117            |         |
| ●850              | 109            | 002            | 014           | 028            |         | 171<br>121    | •010<br>•063 | -•035<br>•019  | 021<br>.036    |         |
| • 900             | 070            | •042           | •020          | •014           | Right   | side          | •003         | 1017           | 1030           |         |
| •025              | •287           | •061           | •093          | •026           |         | .627          | •026         | 859            | •422           |         |
| •075              | 354            | 069            | 183           | •086           |         | •419          | 052          | 420            | •232           |         |
| •150              | •305           | 105            | 306           | .080           |         | 298           | 074          | 320            | • 137          |         |
| • 250             | •215           | 071            | 227           | •059           |         | •203          | 100          | 245            | •068           |         |
| • 350             | •115           | 108            | 233           | •014           |         | •120          | 145<br>192   | -•261<br>-•283 | •009<br>-•059  |         |
| • 450             | •027           | 159            | 256           | <b>-</b> •037  |         | •030<br>-•030 | 192<br>214   | -•283<br>-•270 | 102            |         |
| •550              | •000           | -•147<br>-•130 | 211<br>164    | 058<br>069     |         | 067           | 200          | -•195          | 119            |         |
| •650<br>•750      | -•043<br>-•058 | 090            | 102           | 049            |         | 080           | 132          | 098            | 086            |         |
| <b>850</b>        | -020           | •013           | 020           | •009           |         | 060           | •031         | 001            | 009            |         |
| 900               | 020            | .043           | .018          | 030            |         | 075           | •049         | •035           | •008           |         |
|                   | Į              | Z,             | $b_v = 0$     | .66            |         |               | Z/b          | v =0.93        |                | ···     |
|                   |                |                |               |                | Left    | side          |              |                |                |         |
| •000              | •07B           | •724           | •439          | .451           |         | €248          | •921         | ●789           | •592           |         |
| •025              | 745            | 054            | •429          | -1.090         |         | 346           | 254          | •592           | 727            |         |
| •075              | 767            | 070            | •276          | 881            |         | 356           | 317          | •315<br>•091   | -•490<br>-•376 |         |
| • 150             | 693            | 100            | •178<br>•094  | 250<br>254     |         | 412<br>400    | 300<br>204   | •011           | 362            |         |
| e 250             | -•495<br>-•330 | 141<br>222     | •003          | 286            |         | 400           | -0204        | ••••           | *302           |         |
| ∙350<br>•450      | 360            | 292            | 103           | 319            |         |               |              |                |                |         |
| •550              | 376            | 364            | 191           | 294            |         |               |              |                |                |         |
| •650              | 389            | 330            | 216           | 227            |         | 370           | 159          | 474            | 286            |         |
| •750              | 392            | 099            | 185           | 165            |         | 366           | 039          | -•203          | 271<br>237     |         |
| <b>850</b>        | 376            | •009           | 082           | 104            |         | 345           | •048<br>•084 | -•124<br>-•111 | 237            |         |
| • 900             | 360            | •052           | 047           | 070            | Right   | side          | 1004         | ••••           |                |         |
| - 025             | .450           | •057           | -1.052        | •482           | mgm     | 4884          | 036          | 507            | •659           |         |
| ●025<br>●075      | ■ 659<br>■ 479 | 018            | -1.052<br>617 | • 298          |         | •570          | 213          | 411            | •341           |         |
| •150              | 373            | 037            | 239           | •209           |         | •359          | 128          | 398            | •176           |         |
| • 250             | •261           | 100            | 245           | •115           |         |               |              |                |                |         |
| .350              | +148           | 168            | 296           | •020           |         | 1             |              |                |                |         |
| • 450             | •036           | <b>-</b> •250  | 335           | 078            |         | 1             |              |                |                |         |
| •550<br>•550      | 064            | -•293          | 295<br>216    | -•165<br>-•200 |         | 259           | 212          | 275            | 349            |         |
| .650<br>.750      | 134            | -•308<br>-•147 | 160           | 194            |         | 237           | 052          | 265            | 185            |         |
| • 850             | 138            | •051           | 073           | 053            |         | 212           | .056         | 231            | 098            |         |
| •900              | 164            | •084           | 035           | 021            |         | 252           | •095         | 199            | 102            |         |

TABLE II.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIMONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (p)  $\alpha=15.6^\circ$ ; M=0.60

|                   |                |                |               | for-           |                |                        | (              | Cp for          | <del> </del>   | · · · · · · · · · · · · · · · · · · · |
|-------------------|----------------|----------------|---------------|----------------|----------------|------------------------|----------------|-----------------|----------------|---------------------------------------|
| <u>x</u>          | B=-3.9         | 1/-            | / ·           | B=7.9°         | B=12.70        | B=-3.9°                |                | B=3.9°          | B=7.9°         | B=12.70                               |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1      | //             |                |                        | Z/             | $b_{\nu} = 0.3$ | 38             |                                       |
|                   |                |                |               |                | Left s         | ide                    |                |                 | · <del>-</del> |                                       |
| •000              | 351            | .823           | •179          | •080           | 500            | •273                   | •746           | •333            | 404            | 850                                   |
| •025<br>•075      | 612<br>170     | 136<br>143     | •288          | •089           | 480            | •137                   | 093            | 314             | 668            | 893                                   |
| 150               | 038            | -•143<br>-•159 | •019<br>-•126 | 084<br>184     | 414<br>387     | •069                   | 132            | <b>-</b> •291   | 484            | 767                                   |
| 250               | 012            | - e 116        | 137           | 170            | -•326<br>-•326 | •055<br>•041           | -•129<br>-•134 | -•259<br>-•246  | 379<br>325     | -•627<br>-•520                        |
| •350              | •037           | 100            | 162           | 184            | 288            | .023                   | 161            | -•240<br>-•241  | 325<br>291     | 520<br>437                            |
| • 450             | •037           | 120            | 178           | 184            | 250            | •007                   | 172            | 226             | 259            | - 372                                 |
| •550              | •037           | 102            | 151           | 147            | 200            | •016                   | 143            | 187             | 218            | 313                                   |
| •650              | •046           | 077            | 108           | 118            | <b>-•153</b>   | •016                   | 111            | 146             | 179            | 255                                   |
| •750              | •048           | 043            | 069           | ~.077          | 116            | 028                    | 061            | 087             | 122            | <b>20</b> 2                           |
| •850<br>•900      | •048<br>•062   | •003<br>•037   | 022           | 025            | <b>0</b> 65    | •046                   | •000           | 024             | 063            | 139                                   |
| 1,00              | •002           | •051           | •005          | •003           | 028            | 154                    | 184            | 144             | 154            | 157                                   |
|                   |                |                |               |                | Right          | side                   |                |                 |                |                                       |
| •025              | •350           | 100            | 716           | 254            | <b>-</b> •098  | 403<br>324             | 088            | .109            | •193           | .204                                  |
| •075<br>•150      | -•004<br>-•145 | -•175<br>-•159 | 198<br>056    | 068            | •033           |                        | 136            | •046            | •121           | •240                                  |
| 250               | 158            | -•119<br>-•118 | •014          | •012<br>•052   | •109           | 285                    | 134            | •035            | •107           | •261                                  |
| •350              | 181            | 107            | .032          | •080           | •163<br>•191   | 256<br>240             | 134<br>145     | •041<br>•030    | •114           | •281                                  |
| 450               | 188            | 125            | •037          | •087           | •182           | - 228                  | 154            | •019            | •105<br>•096   | •272<br>•249                          |
| •550              | 156            | 102            | .037          | •089           | •159           | -192                   | 141            | •010            | •084           | •211                                  |
| •650              | 111            | 072            | .046          | ●084           | •132           | 136                    | 107            | •021            | •080           | 173                                   |
| •750              | -•070          | 036            | •046          | •078           | •105           | 083                    | 054            | •037            | .078           | .141                                  |
| 850               | 004            | •023           | •062          | •080           | •091           | <b>~</b> ∗013.         | •016           | •057            | .080           | •109                                  |
| •900              | •014           | 050            | •064          | .080           | •071           | •014                   | 025            | ●048            | •064           | .080                                  |
|                   |                | - 2/           | $b_{v} = 0.$  | 66             |                |                        | Z/DV           | -0.93           |                |                                       |
|                   |                |                |               | -              | Left           | side                   |                |                 |                |                                       |
| •000              | 009            | ●675           | •060          | 545            | -•728          | •286                   | <b>♦</b> 818   | 178             | 682            | 611                                   |
| ●025              | •463           | 06B            | 988           | -1.129         | 730            | •713                   | 079            | 954             | 897            | - 579                                 |
| •075              | .298           | 091            | 533           | -1.020         | 697            | <b>4479</b>            | 111            | 836             | 563            | - 457                                 |
| •150              | •205           | 104            | 388           | 800            | 656            | <b>●254</b>            | 157            | 841             | 545            | 432                                   |
| •250              | •139           | 116            | 318           | 518            | 611            | •132                   | 154            | 680             | ~.566          | 441                                   |
| •350<br>•450      | ●089<br>●037   | 141<br>161     | 305<br>287    | -•382<br>-•320 | 550            |                        |                |                 |                |                                       |
| •550              | •001           | 157            | 241           | -•320<br>-•291 | 489<br>432     |                        |                |                 |                |                                       |
| •650              | 004            | 125            | 171           | -•271<br>-•225 | -•376          | 054                    | 150            | 153             | -•329          | 2.200                                 |
| •750              | •019           | 070            | 097           | 170            | 317            | 029                    | 075            | -•155<br>-•078  | 254            | 308<br>272                            |
| ●850              | •032           | 011            | 026           | 109            | 261            | •010                   | •003           | 013             | 193            | 232                                   |
| •900              | •041           | •018           | •005          | <b>-</b> •075  | 236            | •025                   | •037           | •019            | 163            | - 218                                 |
|                   |                |                | 0.12.22       |                | Right          | side                   |                |                 |                |                                       |
| •025              | -1.033         | 038            | •471          | •621           | •615           | 997                    | 018            | •720            | •891           | •974                                  |
| •075              | 582            | 088            | •279          | 439            | •518           | 897                    | 107            | .446            | •630           | • 784                                 |
| •150<br>•250      | -•374<br>-•328 | 086<br>109     | •200<br>•130  | ■325<br>- 252  | •44B           | <b>~</b> •8 <b>5</b> 9 | 129            | •241            | •409           | •570                                  |
| 1 350             | 312            | -•109<br>-•136 | •139<br>•080  | •253<br>•175   | • 385          |                        |                |                 |                |                                       |
| 450               | 281            | 147            | •041          | •130           | •326<br>•263   |                        |                |                 |                |                                       |
| 550               | 233            | 141            | •014          | •089           | •213           |                        |                |                 |                |                                       |
| •650              | 170            | 111            | .010          | •066           | •157           | ~.126                  | 095            | 011             | •032           | 060                                   |
| •750              | 097            | 061            | .023          | •057           | •105           | 074                    | 063            | 001             | 020            | - 042                                 |
| ∙850              | •001           | •018           | •069          | •06B           | •069           | •005                   | •025           | •041            | 002            | 080                                   |
| 900               | •032           | .041           | .069          | •057           | •028           | •030                   | •057           | •057            | 016            | -114                                  |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (q)  $\alpha=15.8^\circ$ ; M=0.80

|                | T              | <del></del>    | Cp i          | for-           |                |                        |                       | Cp for                | <del>-</del>   |                 |
|----------------|----------------|----------------|---------------|----------------|----------------|------------------------|-----------------------|-----------------------|----------------|-----------------|
| x              | B=-3.9         | B=0°           | B=39°         | B=7.90         | B=12.70        | B=-3.9°                |                       | B=3.9°                | B=7.9°         | B=127°          |
| x - Cv         |                | Z              | by =01        | 7              |                | /                      | Z/                    | $b_{V} = 0.3$         | 1/             | <u>، ع، حرا</u> |
| *              |                |                | - 7 0.7       | <u>'</u>       | Left s         | ide                    |                       | Dy - 0.5              |                |                 |
| •000           | •034           | •853           | •404          | •098           |                |                        |                       |                       |                |                 |
| •025           | 964            | •130           | •319          | •039           | -•508<br>-•463 | -•010                  | •789<br><b>-</b> •037 | •296<br><b>-</b> •304 | -•226<br>-•523 | 541<br>632      |
| •075           | 568            | 075            | 001           | 125            | 412            | 075                    | 126                   | 310                   | 430            | - • 576         |
| 150            | -•261          | 176            | 190           | 228            | 385            | 056                    | 141                   | <b>-</b> •287         | 370            | <b>-</b> •513   |
| •250<br>•350   | 128<br>061     | -•129<br>-•111 | 173<br>192    | 193<br>193     | -•327<br>-•273 | 043                    | 150                   | <b>-•276</b>          | 331            | 460             |
| •450           | 019            | 132            | 207           | -1198          | -•275<br>-•231 | 028<br>034             | -•177<br>-•199        | 263<br>252            | -•299<br>-•267 | -•404<br>-•351  |
| ●550           | •006           | 103            | 158           | 148            | 184            | -011                   | 161                   | <b>-</b> •213         | -•231          | -•302           |
| •650           | •024           | 067            | 116           | 114            | 145            | •000                   | 128                   | 164                   | 195            | - 258           |
| ●750<br>●850   | •034           | 032            | 083           | 083            | 110            | •016                   | -•067                 | 104                   | 145            | 207             |
| 900            | •046<br>•052   | ∙007<br>•043   | 034<br>002    | 039<br>008     | -•066<br>- 033 | •042                   | •009                  | 036                   | 084            | 151             |
|                | 1002           | 1043           |               |                | Right          | 5/de                   | -•167                 | -•133                 | 136            | 137             |
| •025           | • 384          | 801            | 939           | 417            |                |                        | 24.0                  |                       |                |                 |
| •075           | 025            | 400            | 576           | 240            | -•309<br>-•170 | -•401<br>-•351         | 268<br>253            | -•054<br>-•092        | •007<br>••030  | •069<br>•115    |
| ♦150           | 202            | 236            | 280           | 151            | 045            | 317                    | 188                   | 073                   | 013            | •172            |
| •250           | 199            | -•129          | 142           | 073            | •072           | <b>~</b> •2 <b>7</b> 7 | -+140                 | 036                   | •022           | •231            |
| • 350<br>• 450 | 214            | -•075<br>-•061 | 063           | 011            | •142           | <b>26</b> 5            | 121                   | 019                   | •039           | •253            |
| 550            | 167            | -•032          | 020<br>.007   | •031<br>•051   | •177<br>•169   | -•250<br>-•218         | 126<br>109            | -017                  | •052           | •250            |
| •650           | 117            | 014            | .024          | •066           | •148           | 161                    | 070                   | 007<br>.010           | •063<br>•072   | •231<br>•204    |
| ●750           | -•076          | •009           | •036          | •072           | •124           | 096                    | 020                   | •031                  | •077           | • 164           |
| •850           | 016            | •048           | •057          | •081           | •097           | 022                    | •043                  | .058                  | .084           | •130            |
| •900           | •001           | •060           | •060          | •075           | •080           | •003                   | •052                  | •051                  | •067           | •086            |
|                |                |                | $b_{V} = 0.0$ | 56             |                |                        | 2/0 <sub>V</sub>      | =0.93                 |                |                 |
|                | <u> </u>       |                |               |                | Left           | s ide                  |                       |                       |                |                 |
| •000           | •366           | •720           | •461          | •066           | 397            | •600                   | .877                  | •399                  | 140            | - +656          |
| •025           | •394           | 035            | -1.007        | 946            | <b>-∙645</b>   | <b>♦656</b>            | 090                   | 714                   | 848            | 582             |
| •075<br>•150   |                | -•078<br>-•103 | 504<br>358    | - 822          | ~•621          | •414                   | 167                   | 533                   | 420            | 434             |
| 250            | •104           | 120            | 289           | -•657<br>-•461 | -•591<br>-•553 | •192<br>•072           | 203<br>191            | 483                   | 376            | 409             |
| • 350          | •048           | 161            | 289           | 343            | 513            | •012                   |                       | 501                   | <b>-</b> •389  | -•412           |
| +450           | 005            | -•197          | 301           | 286            | -•468          |                        |                       |                       |                |                 |
| •550           | 041            | 196            | <b>~•27</b> 3 | 269            | 413            |                        |                       |                       |                |                 |
| •650<br>•750   | -•034<br>-•010 | 152<br>073     | 201<br>120    | 249<br>208     | 363            | 117                    | 161                   | 261                   | 358            | -•276           |
| 850            | •018           | -•003          | 046           | 208<br>161     | 312<br>271     | -•073<br>-•037         | -•058<br>•037         | 208<br>143            | -•326<br>-•276 | - • 249         |
| •900           | •027           | •037           | 007           | 131            | 252            | 023                    | •075                  | 107                   | 276<br>255     | 219<br>208      |
|                |                |                |               |                | Right          |                        | <u></u>               |                       |                |                 |
| •025           | -1.093         | 059            | •413          | •614           | •710           | 730                    | •016                  | •669                  | .889           | 1.042           |
| •075           | 522            | -•093          | •225          | •401           | •579           | 533                    | 128                   | •38Ó                  | 614            | 837             |
| •150<br>•250   | -•338<br>-•298 | -•064<br>-•084 | •163<br>•108  | •308           | •507           | 519                    | <b>-</b> •132         | •186                  | •383           | •614            |
| •350           | -•309          | 117            | •108<br>•045  | •236<br>•163   | •444           |                        |                       |                       |                | 1               |
| • 450          | 309            | 137            | •004          | •110           | •305           |                        |                       |                       |                | 1               |
| •550           | -•271          | 134            | 025           | •074           | .247           |                        |                       |                       |                | J               |
| •650           | 203            | 097            | 025           | •054           | •184           | 233                    | 093                   | 051                   | 016            | 069             |
| •750<br>•850   | -•120<br>-•025 | -•035          | 001           | •039           | •122           | 197                    | 035                   | 057                   | 072            | 039             |
| 900            | •016           | •051<br>•077   | •049<br>•063  | •049<br>•039   | •077<br>•027   | 128<br>096             | •063                  | 001                   | 057            | 098             |
|                | 5010           |                | •000          | 1037           | 1021           |                        | •093                  | ●007                  | 081            | -•157           |

TABLE III.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Concluded (r)  $\alpha=15.9^\circ$ ; M=0.85

| Left side    000   | 8=3.9°<br>b <sub>V</sub> = 0.3<br>-322<br>-425<br>-409<br>-318<br>-295<br>-279<br>-240<br>-129<br>-054<br>-139 |  | B=127° 517641587581482428375327281225176141                 |
|--|--|--|---|
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | .322<br>425<br>409<br>364<br>318<br>279<br>279<br>240<br>129<br>129<br>054<br>139                              | 237<br>597<br>597<br>501<br>432<br>377<br>336<br>303<br>258<br>221<br>170<br>110 | 641<br>587<br>531<br>482<br>428<br>375<br>327<br>221<br>225 |
| Left side  .000  |  | 597<br>501<br>432<br>377<br>336<br>258<br>221<br>170                             | 641<br>587<br>531<br>482<br>428<br>375<br>327<br>221<br>225 |
| .000   |  | 597<br>501<br>432<br>377<br>336<br>258<br>221<br>170                             | 641<br>587<br>531<br>482<br>428<br>375<br>327<br>221<br>225 |
| **************************************   |  | 597<br>501<br>432<br>377<br>336<br>258<br>221<br>170                             | 641<br>587<br>531<br>482<br>428<br>375<br>327<br>221<br>225 |
| -1.053   | 409<br>364<br>318<br>275<br>279<br>240<br>129<br>129<br>054<br>139   | 501<br>432<br>377<br>336<br>303<br>258<br>221<br>170<br>110                      | 587<br>531<br>482<br>428<br>375<br>327<br>281<br>225        |
| *** **********************************   | 318<br>295<br>279<br>240<br>192<br>129<br>054<br>139   | 377<br>336<br>303<br>258<br>221<br>170<br>110                                    | 482<br>428<br>375<br>327<br>281<br>225<br>176               |
| -150   | 295<br>279<br>240<br>192<br>129<br>054<br>139  | 336<br>303<br>258<br>221<br>170<br>110   | 428<br>375<br>327<br>281<br>225<br>176                      |
| **************************************   | 279<br>240<br>192<br>129<br>054<br>139   | 303<br>258<br>221<br>170<br>110  | 375<br>327<br>281<br>225<br>176                             |
| **450  | 240<br>192<br>129<br>054<br>139  | 258<br>221<br>170<br>110   | 327<br>281<br>225<br>176                                    |
| **************************************   | 192<br>129<br>054<br>139   | 221<br>170<br>110  | 281<br>225<br>176   |
| **************************************   | -•129<br>-•054<br>-•139  | -•170<br>-•110   | 225<br>176  |
| *750<br>*850<br>*900  *018  *005  *005  *008  *005  *008  *005  *008  *005  *008  *008  *008  *009 | 139  |  |   |
| •900 •045 •038 -•012 -•028 -•040 -•156 -•166  Right side   | 074  | 145  | 141   |
| Right side   |  |  |   |
| 270  |  |  |   |
| 1 .025   .271704 -1.064478412  940270  |  | 044  | •001  |
| 1 •025   •2/1 =•/04 =1•05 = 310 = 370   =-700 =-306  | 153  | 096  | •034  |
| 150  | 144  | 086  | •098  |
| 250 -298 -225 -220 -163 -011 -288 -200   | 111  | 045  | .163<br>.186  |
| *350 -*246 -*149 -*151 -*089 *072 -*276 -*176  | 088<br>080   | 023<br>006   | 203   |
| 450223120091034 .126264178   | 057  | •013   | 193   |
| •550 -•165 -•070 -•045 -•010177102   | 025  | .036   | .175  |
| 650122040012 000 112106041   | •002   | •050   | .148  |
| 050 1001 month 4031  | •039   | •061   | .116  |
| 000 014 0050 0046 0054 0072 011 0048   | •035   | •043   | •072  |
| $\frac{z}{b_v} = 0.66$   | v =0.93  |  |   |
| Left side  |  |  | <del>_</del>  |
| •000 •337 •721 •506 •172 -•261 •63! •892   | •507   | 001  | 615   |
| 1 005 +408 -1088 -1-169966651 +65°109  | 748  | 906  | 615   |
| 1 075   •241   -•118   -•521   -•830   -•624   •408   -•217  | 484  | 410<br>362   | 449<br>412  |
| •150 •150 -•133 -•360 -•666 -•601 •16' -•248   | 418<br>428   | 367  | - 423   |
| •250 •085 -•150 -•272 -•407  | -1420  | • 50 ,   | •   |
| •350 •014 -•195 -•291 -•360 -•521<br>•450 -•063 -•242 -•312 -•298 -•475  |  |  |   |
|  |  |  |   |
| 450 -105 -180 -221 -262 -382 -19; ~177   | 301  | 367  | 304   |
| 4750 -•073 -•091 -•151 -•244 -•338 -•143 -•064   | 268  | 349<br>318   | -•276<br>-•244  |
| .850033012078207296097 .039  | 214<br>180   | 299  | 232   |
| 900 -017 0028 -039 -1100   |  | 12//   |   |
| Right side   |  | - 000  | 1.054   |
| •025 -1•335 -•077 •378 •596 •727 -•815 -•007   | •647<br>•343   | •882<br>•596   | 1 • U 5 4<br>• 8 3 7  |
| •075   -•828 -•123 •187 •382 •578   -•443188   | 139  | •353   | .605  |
| 150 -02/4 -0102 0127   |  |  |   |
| •250   |  |  |   |
| •450 -•307 -•187 -•049 •068 •288   |  |  |   |
| •550 -•280 -•184 -•084 •027 •226   | 107  | 065  | •062  |
| •650 -•222 -•140 -•077 •010 •172 -•279 -•120   | 107<br>111   | 122  | 041   |
| •750 -•158 -•067 -•046 -•003 •114 -•259 -•051  | 046  | 112  | 105   |
| •850   | 043  | 145  | 173   |

Table IV.- pressure coefficients for the combination of the Wing, fuselage, vertical tail, and horizontal tail. Horizontal tail in the forward position;  $i_t$  = -6°

(a)  $\alpha = -9.4^{\circ}$ ; M = 0.60

|                              |                |                | Cp             | for-           |                       |                  |                                | Cp for .       | _             |               |
|------------------------------|----------------|----------------|----------------|----------------|-----------------------|------------------|--------------------------------|----------------|---------------|---------------|
| x                            | B=-3.9°        | B=0°           | B=3.9°         | B=7.9°         | B=12.7°               | B=-3.9°          | B=0°                           | B=3.9°         | B=7.9°        | B=12.7°       |
| \(\frac{x}{C_{\mathbf{V}}}\) |                | Z              | by = 0.1       | 7              |                       |                  | Z                              | by = 0.3       | 18            |               |
| ľ                            |                |                |                |                | Left s                | ide              |                                |                | <del></del> . |               |
| •000                         | •724           | .836           | ø562           | 168            | -1.028                | •460             | •824                           | .548           | 092           | ~.687         |
| ●025<br>●075                 | •246           | 112            | 546            | -1.005         | -2.178                | •330             | 094                            | 594            | -1.159        | -1.069        |
| 150                          | -100<br>-014   | 130<br>180     | 363<br>336     | -•622<br>-•475 | -1.082<br>674         | •119<br>•009     | ~•153<br>-•185                 | -•450<br>-•363 | 929           | -1.053        |
| 250                          | 052            | 158            | 244            | 322            | - 404                 | 082              | ~•222                          | 343            | 565<br>420    | 954<br>817    |
| •350                         | 086            | 164            | 228            | 255            | 317                   | 150              | - 260                          | - 359          | 374           | -4664         |
| •450                         | 130            | 190            | 233            | 241            | 281                   | 200              | 299                            | 359            | 342           | 543           |
| •550                         | 141            | 180            | 201            | 193            | 242                   | 200              | 263                            | 306            | 294           | 461           |
| •650                         | 109            | 142            | 149            | ~.152          | 212                   | 173              | 217                            | - • 2 4 4      | 251           | 422           |
| •750<br>•850                 | -•077<br>-•025 | -•098<br>-•034 | -•091<br>-•032 | 104            | 190                   | 123              | 153                            | 167            | 189           | - 381         |
| 900                          | •005           | •007           | •007           | 044<br>005     | 135<br>091            | 050<br>.000      | 066<br>023                     | 073<br>025     | 118           | 317           |
| 1                            |                |                | ••••           |                | Right                 | side             |                                |                | 072           | 270           |
| •025                         | 478            | 078            | •283           | 4541           | •776                  | 711              | 114                            | .340           | •591          | <b>∗</b> 760  |
| •075                         | 414            | 171            | •078           | •541<br>•275   | . 479                 | 474              | 183                            | •109           | .311          | •491          |
| •150<br>•250                 | 348            | 187            | 012            | •132           | •304                  | 389              | 199                            | •002           | •153          | .313          |
| • 350                        | -•269<br>-•246 | -•174<br>-•185 | 046<br>096     | •059<br>- •034 | <b>185</b>            | 346              | 231                            | 087            | •032          | •167          |
| •450                         | 250            | 208            | 137            | -•026<br>-•085 | •082<br><b>-</b> •007 | 353<br>351       | -•2 <b>65</b><br>-•28 <b>5</b> | 149            | 065           | •057          |
| 550                          | 209            | 180            | 133            | 104            | 043                   | 314              | -•267                          | 196<br>194     | 129<br>157    | 037<br>091    |
| •650                         | 150            | 139            | 107            | 088            | 053                   | - 239            | 212                            | 167            | 147           | 103           |
| •750                         | 096            | 089            | 071            | 067            | 046                   | 159              | 135                            | 105            | 101           | - 085         |
| ●850                         | -•011          | -•009          | •000           | 005            | 009                   | 055              | 041                            | 012            | -•035         | 055           |
| •900                         | •018           | •027           | <b>.</b> 020   | <b>●004</b>    | •000                  | 014              | -•023                          | <b>-</b> •012  | 030           | 075           |
|                              |                | 2/             | $b_{V} = 0.$   | 66             |                       | <u> </u>         | Z/b                            | v =0.93        |               |               |
|                              |                |                |                |                | Left                  | side             |                                |                |               |               |
| •000                         | •422           | •838           | •530           | •022           | 340                   | •358             | •607                           | .114           | •057          | 098           |
| ●025                         | •340           | 171            | 859            | -1.106         | 817                   | •073             | 909                            | -1.596         | 551           | 505           |
| •075                         | •105           | 240            | 598            | -1.010         | <b>-</b> ∙852         | 278              | -•747                          | -1.603         | 501           | 496           |
| ●150<br>●250                 | 061<br>178     | 306<br>368     | 550<br>537     | -•746<br>-•526 | ~•804<br>~•649        | 417              | 699                            | -1.295         | 484           | - 498         |
| •350                         | 264            | 413            | 537            | 443            | -•5 <b>4</b> 9        | 380              | 557                            | 747            | 480           | 507           |
| • 450                        | 317            | 434            | 521            | 411            | 564                   |                  |                                |                |               |               |
| •550                         | 310            | 400            | 461            | 395            | 573                   | I                |                                |                |               |               |
| •650                         | 255            | 308            | 359            | 381            | <b>~•580</b>          | 307              | 356                            | 388            | 507           | 518           |
| •750                         | 171            | 217            | 251            | 386            | 573                   | 187              | 215                            | 254            | 496           | - 491         |
| •850<br>•900                 | -•105<br>-•073 | 126            | 149            | 368            | 523                   | 093              | 098                            | 128            | 459           | 448           |
| 1 900                        |                | -•087          | 101            | 342            | -•505<br>Right        | -•055<br>side    | -•048                          | 075            | 434           | 425           |
|                              | 1              |                |                |                |                       |                  |                                |                |               |               |
| •025<br>•075                 | 854<br>642     | -•176<br>-•270 | .354           | ∙598<br>•298   | •751                  | -1.524           | 861                            | ■082<br>= 305  | •360          | •609          |
| 150                          | 533            | 308            | •078<br>-•062  | •298<br>•114   | .479<br>.288          | -1.556<br>-1.312 | 760<br>685                     | -•295<br>-•425 | 062<br>237    | •185<br>-•028 |
| •250                         | 551            | 384            | 187            | 046            | •116                  | 1                | - • • • •                      | 723            | -6231         | - 1020        |
| •350                         | 558            | 427            | 274            | 163            | 023                   | 1                |                                |                |               |               |
| 450                          | 519            | 432            | 317            | 241            | 130                   | İ                |                                |                |               |               |
| •550                         | 455            | 400            | 304            | 264            | 183                   |                  |                                |                |               |               |
| •650                         | 358            | -•297          | 247            | 246            | 194                   | 332              | 263                            | 199            | 230           | 196           |
| •750<br>•850                 | 253<br>125     | 210<br>094     | 158            | ~.214          | 185                   | 241              | 199                            | 162            | 253           | - • 244       |
| 900                          | 059            | 094<br>041     | 066<br>030     | 124<br>134     | -•158<br>-•187        | -•107<br>-•050   | -•075<br>-•023                 | 064<br>016     | 195           | - • 206       |
|                              | 1 .027         | 1071           | 1000           | -1134          |                       | ~*030            |                                | ~ 1010         | 205           | -•219         |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD FOSITION;  $i_t=-6^\circ$  - Continued (b)  $\alpha=-9.6^\circ$ ; M=0.80

|                  |                |                | Cp           | for-           |               |                  |                | Cp for               |                |              |
|------------------|----------------|----------------|--------------|----------------|---------------|------------------|----------------|----------------------|----------------|--------------|
| x                | B=-3.9         | B=0°           | B=3.9        | B=7.9°         | B=12.7°       | B=-3.9°          | B=0°           | B=3.9°               | B=7.9°         | B=12.7°      |
| x C <sub>v</sub> |                | Z/             | by = 0.1     | 11             |               |                  | Z              | by = 0.3             | 38             |              |
| V                |                |                | <u> </u>     |                | Left s        | ide              | ·              |                      |                |              |
| •000             | •847           | •883           | •714         | •372           | 100           | .664             | •866           | •729                 | •381           | 089          |
| •025             | •240           | -•102          | 554          | 863            | -1.374        | •324             | 073            |                      | -1.568         | 904          |
| •075             | •104           | 130            | 382<br>362   | 784<br>519     | -1.103<br>851 | •122<br>•014     | 148<br>134     | 452<br>373           | -1.345<br>398  | 899<br>816   |
| •150<br>•250     | -•018<br>-•055 | 192<br>167     | 254          | 298            | ~•606         | 090              | 225            | 350                  | - 314          | 778          |
| •350             | 102            | 184            | 244          | 238            | 429           | 189              | 314            | 387                  | 323            | 622          |
| 450              | 177            | 231            | 266          | 232            | 345           | 284              | 384            | 415                  | 326            | -•473        |
| 4550             | 205            | 233            | 242          | 206            | 273           | 313              | -4355          | 362                  | 288            | 371          |
| •650             | 186            | 193            | 190          | 162            | 235           | 283              | -•292          | -•291                | 258            | 320          |
| •750             | 137            | -•126          | 122          | 123            | 204           | 197<br>087       | -•190<br>-•081 | 201<br>093           | 212<br>144     | 307<br>300   |
| *850             | 061<br>016     | 046<br>002     | 037<br>.005  | -•062<br>-•022 | 151<br>118    | 030              | 028            | -•033                | 105            | <b></b> 271  |
| •900             |                |                | •003         |                | Right         | side             |                |                      |                |              |
| 4025             | -4424          | 034            | •295         | 4537           | •767          | 924              | 081            | •349                 | •580           | •758         |
| •025<br>•075     | 417            | 154            | .090         | •537<br>•281   | • 483         | - 456            | 164            | •119                 | •313           | • 500        |
| •150             | 363            | 187            | 011          | .136           | • 306         | 384              | 189            | •005                 | .157           | •321         |
| •250             | 266            | 173            | 053          | •054           | •184          | 348              | 234            | 090                  | •028           | •167<br>•040 |
| • 350            | 265            | 198            | 116<br>183   | 037<br>126     | .066<br>046   | 378<br>402       | -•296<br>-•357 | 184<br>272           | -•094<br>-•193 | 097          |
| • 450<br>• 550   | -•278<br>-•239 | 239<br>231     | 195          | 161            | 109           | 367              | 349            | 292                  | 250            | 180          |
| 650              | -179           | 181            | 172          | 162            | 130           | 287              | 281            | 265                  | 255            | 213          |
| 1750             | -116           | 123            | 128          | 135            | 135           | 183              | 167            | 166                  | 191            | 191          |
| .850             | 024            | 025            | 029          | 058            | 091           | 069              | 054            | 053                  | 103            | 145          |
| •900             | •014           | •011           | 001          | 032            | 074           | 025              | 028            | 035                  | -•088          | 166          |
|                  |                | Z              | by = 0       | .66            |               |                  | Z/b            | v =0.93              |                |              |
|                  |                |                |              |                | Left          | s ide            |                |                      |                |              |
| •000             | •677           | •901           | •749         | •417           | •025          | •658             | •739           | •603                 | •452           | •184         |
| .025             | •348           | 110            | -1.093       | -1.600         | 899           | 009              | 854            | -1.414               | 44B            | 426          |
| •075             | •121           | 196            | 478          | -1.321         | ~.919         | 333              | 930            | -1.315               | 413            | -•421        |
| •150             | -+042          | <b>-•28</b> 3  | 510          | 633            | ~•848         | 465              | 848<br>586     | -1.265<br>851        | 412<br>403     | 427<br>430   |
| •250             | 345            | -•395<br>-•526 | 530<br>600   | -:401<br>-:327 | 582<br>430    | 405              | -8200          | -#051                | -1403          | - 5450       |
| • 350<br>• 450   | 465            | 545            | 560          | 344            | 453           |                  |                |                      |                |              |
| 550              | 519            | 549            | 534          | 370            | 477           |                  |                |                      |                |              |
| •650             | 427            | 367            | 429          | 388            | 505           | -•397            | 408            | 542                  | 423            | 462          |
| ∙750             | -+242          | 267            | 318          | 416            | 528           | 268              | 263            | 414                  | -•430          | 456          |
| 850              | 147            | 155            | 195          | 426            | 521           | 159<br>122       | 149<br>107     | 279<br>213           | 416<br>407     | 433<br>427   |
| •900             | 107            | 110            | 137          | -•429          | 524           |                  |                | -0215                |                | - 6421       |
| 1                |                |                |              |                |               | tside            |                |                      |                |              |
| •025             | -1.083         | 102            | •371<br>•102 | •612<br>•320   | •777<br>•506  | -1.345<br>-1.296 | -•605<br>-•873 | •021<br><b>-•379</b> | •360<br>-•070  | •636<br>•202 |
| •075<br>•150     | 491<br>482     | 220<br>278     | 043          | •142           | •319          | -1.232           | ·783           | 516                  | 277            | 039          |
| •250             | 534            | 401            | 208          | 050            | .123          |                  |                |                      |                |              |
| •350             | 635            | 539            | 345          | 215            | 062           | }                |                |                      |                |              |
| • 450            | -4554          | 517            | 444          | 353            | 221           |                  |                |                      |                |              |
| •550             | -+524          | 525            | 470          | 435            | 327           | 1 ,              | 2.4            | - 202                |                | 304          |
| •650             | -+435          | -•431<br>- 243 | 428          | - 429<br>- 203 | -•359         | 432              | -•349<br>-•272 | -•292<br>-•231       | -•336<br>-•302 | 304<br>301   |
| •750             | 305            | 263<br>114     | 227<br>105   | 292<br>190     | 301<br>230    | 403<br>254       | 131            | 120                  | 223            | 230          |
| •850<br>•900     | 158            | 067            | 065          | -196           | -•251         | 185              | 076            | 084                  | 226            | 242          |
| 700              | 1 .0 / 7       |                | ••••         | ••••           |               | 1                |                |                      |                |              |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Continued (c)  $\alpha=-9.7^\circ$ ; M=0.85

|                |                |                | Cp                          | for-                   |                  |                |                | Cp for           |   |                  |
|----------------|----------------|----------------|-----------------------------|------------------------|------------------|----------------|----------------|------------------|---|------------------|
| - <u>x</u>     | B=-3.9         | B=0°           | B=3.9°                      | B=7.9°                 | B=12.7°          | B=-3.9°        | B=0°           | B=3.9°           | B=7.9°                                  | B=12.7°          |
| Cv             |                | 2/             | br =0.1                     | /                      |                  |                | Z              | by = 0.3         | 38                                      |                  |
| ·              |                |                |                             |                        | Left s           | ide            |                |                  |   |                  |
| •000           | 881            | 1906           | •760                        | •478                   | •053             | •707<br>•328   | •888           | • 772            | •498                                    | •045             |
| ●025<br>●075   | •245<br>•110   | -•104<br>-•134 | 539<br>420                  | -•827<br>-•784         | -1.312<br>-1.035 | •328<br>•129   | 077<br>161     | -•987<br>-•397   | -1.088<br>-1.217                        | -1.080<br>-1.026 |
| 150            | 016            | 205            | 387                         | -4662                  | 815              | 014            | 189            | 373              | -1.074                                  | 726              |
| •250           | 053            | 178            | 259                         | 354                    | 633              | 085            | 236            | 342              | 337                                     | 735              |
| •350           | 106            | 193            | 247                         | 262                    | 442              | 192            | <b>~</b> •308  | 388              | 309                                     | 670              |
| •450           | 187            | 254            | 285                         | 249                    | 356              | 313            | -•421          | 447              | 326                                     | - 528            |
| •550<br>•650   | 227            | 280<br>249     | -•266<br>200                | <b>~</b> ₄ 223         | -•302<br>362     | ~•366          | =•456<br>= 300 | 418              | 346                                     | 412              |
| •650<br>•750   | 171            | 169            | ~•208<br>-•135              | 186<br>132             | -•262<br>-•223   | 359            | -•388<br>-•225 | 309<br>214       | 309                                     | 349              |
| 850            | 078            | 070            | 044                         | 058                    | -•165            | 248            | 101            | 108              | 214<br>113                              | 308<br>285       |
| 900            | 032            | 020            | 001                         | 018                    | 129              | 046            | 034            | 042              | 055                                     | 265              |
|                | -              |                | -                           |                        | Right            | side           |                |                  | •••                                     |                  |
| •025           | 412            | 021            | •305                        | •541                   | •772             | ~•953          | 074            | •356             | •579                                    | •760             |
| •075           | 433            | <b></b> 158    | •094                        | •278                   | - +487           | 470            | 163            | •126             | •314                                    | •504             |
| •150<br>•250   | 387<br>277     | -•196<br>-•181 | -•006<br>-•054              | •138<br>•055           | •308<br>•192     | 384            | 192<br>232     | •013             | •162                                    | •325             |
| •350           | 277            | -•151<br>-•215 | 119                         | <b>03</b> 5            | •069             | -•347<br>-•383 | 308            | 088<br>188       | •037<br>-•084                           | •179<br>•047     |
| • 450          | - 293          | 269            | 200                         | 137                    | 053              | 440            | - 394          | 301              | 206                                     | 100              |
| •550           | 263            | 283            | 235                         | 184                    | 127              | 416            | 442            | 366              | 288                                     | 203              |
| •650           | -•198          | 233            | 224                         | 197                    | 168              | 304            | 365            | 359              | 319                                     | 271              |
| •750           | <b>-</b> •129  | 162            | 169                         | <b></b> 176            | 192              | 202            | 192            | 237              | 242                                     | 279              |
| 850            | 035            | 048            | 055                         | 072                    | 138              | 081            | 074            | 068              | 102                                     | 209              |
| •900           | •005           | 010<br>Z/      | $\frac{021}{b_{\nu} = O.1}$ | -•037<br>66            | 118              | -•045          | -•047<br>Z/h   | -•052<br>v =0.93 | 068                                     | 204              |
|                |                |                | υ <sub>ν</sub> - υ.         |                        | Left             | s ide          | -/2            | y - 0. 55        |   | <del></del>      |
| 000            | 777            | 022            | 70/                         | r10                    |                  | r -            | 700            |                  |   |                  |
| •000<br>•025   | •716           | •923<br>-•095  | •794<br>•1•068              | •519                   | •138             | •697           | •780           | •677             | 455                                     | •223             |
| •075           | 137            | -•095<br>-•183 | -1.000<br>781               | -1.427<br>-1.274       | -∙798<br>-•815   | •014<br>-•324  | 725<br>859     | -1.316<br>-1.373 | -•994<br>-•933                          | 419<br>408       |
| 150            | ~•035          | 267            | 46R                         | -1.160                 | 800              | 434            | 803            | -1.140           | 949<br>949                              | - 400            |
| •250           | 191            | 369            | 502                         | 852                    | 764              | - 459          | 681            | 784              | 966                                     | 417              |
| •350           | 346            | 514            | 587                         | 278                    | 548              |                |                |                  |   |                  |
| • 450          | -4499          | 638            | 672                         | 492                    | 436              |                |                |                  |   |                  |
| •550           | 578            | -•668          | 502                         | 579                    | 439              |                |                |                  |   |                  |
| •650           | 585<br>300     | <b>-</b> 4627  | 448                         | 404                    | <b></b> 462      | 598            | 425            | 574              | 474                                     | 448              |
| •750<br>•850   | 152            | -∙205<br>-•178 | -•359<br>-•227              | <b>-</b> ∙369<br>-•292 | -•484<br>-•494   | -•298<br>-•199 | 340<br>237     | -•474<br>-•380   | 519<br>484                              | 448<br>438       |
| 900            | 131            | 138            | 169                         | 244                    | 504              | 167            | ~•183          | -4310            | 449                                     | - • 432          |
|                |                |                | •••                         | • • • • •              | Right            | <b>.</b>       | •102           | • 510            | • | 1432             |
| •025           | -1.061         | 075            | •386                        | •617                   | •781             | -1.270         | 519            | •047             | •403                                    | •670             |
| •075           | 740            | 195            | •121                        | • 332                  | •521             | -1.250         | 824            | 357              | 042                                     | • 226            |
| •150           | 452            | 250            | 021                         | • 153                  | •333             | -1.198         | 719            | -•471            | <b>-</b> •251                           | 016              |
| • 250          | 523            | 379            | 187<br>354                  | 038                    | •139             |                |                |                  |   |                  |
| • 350<br>• 450 | -•628<br>-•654 | 526<br>655     | 354<br>503                  | -•207<br>-•370         | -•049<br>-•211   |                |                |                  |   |                  |
| 1550           | 490            | <b>-</b> •636  | -•505<br>-•584              | 468                    | -•211<br>-•349   |                |                |                  |   |                  |
| .650           | 475            | 534            | 549                         | 525                    | 458              | 463            | <b>~.45</b> 5  | 566              | 689                                     | 736              |
| •750           | 341            | <b>-</b> •286  | 401                         | 503                    | 531              | 467            | 345            | 315              | 322                                     | 525              |
| 850            | ~•185          | 139            | 106                         | 108                    | <b>-</b> •279    | 340            | <b>-</b> •209  | 166              | 176                                     | 219              |
| •900           | 125            | 100            | 081                         | 101                    | 252              | 271            | 155            | 123              | 162                                     | 213              |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Continued (d)  $\alpha=-9.8^\circ$ ; M=0.90

|                    |                |                | Cp            | for-           |                |                  |                    | Cp for        | _              |              |
|--------------------|----------------|----------------|---------------|----------------|----------------|------------------|--------------------|---------------|----------------|--------------|
| х                  | B=-3.9         | B=0°           | B=39°         | B=7.9°         | B=12.70        | B=-3.9°          |                    | B=39°         | B=7.9°         | B=12.7°      |
| X   C <sub>v</sub> |                | Z/             | by = 0.1      | 1/             |                |                  | Z/                 | by = 0.       | <del>3</del> 8 |              |
| •                  |                |                |               | <u> </u>       | Left s         | ide              |                    | -, -,         |                |              |
| •000               | •913           | •931           | .807          | ●556           | •126           | •752             | •902               | •807          | •575           | •136         |
| .025               | ●257           | 081            | 473           | 803            | -1.143         | •339             | 049                | 887           | -1.188         | 691          |
| •075               | •122           | 114            | 455           | 732            | 946            | •143             | ··•142             | 689           | -1.092         | 691          |
| •150               | 005            | 195            | 415           | 672            | ~•782          | •035             | 170                | 420           | -1.004         | -•705        |
| • 250              | -•042<br>-•092 | 163<br>175     | 270<br>233    | 616<br>325     | -•602<br>-•539 | 062<br>171       | ··•203             | 290<br>360    | 822<br>444     | 702<br>653   |
| • 350<br>• 450     | 182            | -+245          | 273           | -•325<br>-•254 | -•512          | -300             | ***384             | 425           | 215            | 587          |
| 550                | 260            | 308            | - 302         | 182            | 433            | 376              | 467                | 473           | 211            | 522          |
| .650               | 291            | 323            | 271           | 167            | 354            | 457              | 523                | 456           | 283            | - 446        |
| •750               | 332            | 304            | 171           | 140            | 284            | 486              | ··•508             | 246           | 259            | 356          |
| ●850               | 178            | 096            | 057           | 080            | 221            | 297              | 100                | 104           | 143            | 325          |
| •900               | 078            | 025            | 009           | -•039          | 196            | 107              | 013                | 040           | 080            | 304          |
|                    |                |                |               |                | Right          | side             |                    |               |                |              |
| •025               | -+366          | 003            | .317          | • 554          | .800           | 869              | 057                | •356          | •580           | •772         |
| •075               | 467            | 140            | •101<br>- 001 | 294            | . 515          | 687              | 154                | •141          | •322           | •522         |
| •150<br>•250       | -•438<br>-•291 | -•193<br>-•167 | 001<br>042    | •150<br>•071   | •335<br>•213   | 483<br>293       | ··•175             | •028<br>-•068 | .181<br>.050   | •351<br>•198 |
| 350                | 257            | -•107<br>-•195 | 106           | 024            | •089           | 359              | ··• 284            | 171           | 065            | •070         |
| 450                | 289            | 254            | 193           | 128            | 033            | 435              | 375                | 288           | 199            | 080          |
| -550               | 303            | 312            | 261           | 199            | 120            | 485              | 467                | 376           | 298            | 191          |
| •650               | 254            | 303            | 282           | 244            | 181            | 432              | 517                | 445           | 377            | 273          |
| •750               | 165            | 296            | 351           | 329            | 272            | 228              | 472                | 476           | 436            | 349          |
| ●850               | 051            | 068            | 158           | 210            | 257            | 094              | 037                | 331           | 359            | 357          |
| •900               | <b>-</b> •00B  | 020            | 070           | 132            | <b>~</b> .316  | <b>~.</b> 046    | •012               | 081           | 250            | 430          |
| '                  |                | Z/             | $b_{V} = O$ . | 66             | ,              |                  | 2/6                | ,=0.93        |                |              |
|                    |                |                |               |                | Left           | s ide            |                    |               |                |              |
| •000               | a756           | •938           | •838          | <b>.</b> 587   | ·197           | .748             | .822               | •731          | •531           | •254         |
| •025               | •377           | 056            | 965           | -1.252         | <b>78</b> 2    | •075             | ···•597            | -1.126        | 894            | 436          |
| •075               | •169           | -+146          | 808           | -1.124         | -4795          | 262              | ··•753             | -1.322        | 838            | 426          |
| •150               | •004           | 229            | 666           | -1.057         | B19            | 396              | **•747             | -1.169        | 835            | 426          |
| •250               | 149            | 327            | 386           | -1.009         | 924            | 434              | ··•734             | 839           | 846            | 432          |
| •350<br>•450       | 307<br>462     | -•460<br>-•602 | 519<br>614    | -•746<br>-•307 | 569<br>445     |                  |                    |               |                |              |
| •550               | 601            | -•703          | 628           | 449            | -4450          |                  |                    |               |                |              |
| •650               | 659            | 738            | 600           | 485            | 468            | 847              | 717                | 617           | 350            | 450          |
| •750               | 704            | 711            | 427           | 387            | 485            | 774              | 469                | 524           | 504            | - 453        |
| ●850               | ~.610          | 092            | 209           | 339            | 490            | 451              | 308                | 461           | 532            | - 449        |
| •900               | 260            | 033            | 177           | 306            | 505            | 340              | - 261              | 428           | 514            | - • 446      |
|                    |                |                |               |                | Right          |                  |                    |               |                |              |
| •025<br>•075       | 952<br>806     | 045<br>167     | •404<br>•150  | •623<br>•348   | • 795<br>• 539 | -1.181           | *** 459<br>*** 749 | •101          | •439<br>=•005  | •716         |
| •150               | 632            | 218            | •011          | •174           | •363           | -1.226<br>-1.115 |                    | 312<br>392    | 005<br>222     | •282<br>•037 |
| •250               | 403            | <b>~•334</b>   | 153           | 002            | •170           | 1 1 1 1 2        |                    | - 6 3 7 2     | -1666          | •057         |
| 350                | 561            | - 472          | 314           | 183            | 012            |                  |                    |               |                | 1            |
| 450                | 636            | 621            | 459           | 335            | 173            |                  |                    |               |                |              |
| •550               | 631            | 695            | 586           | 488            | 310            |                  |                    |               |                | ı            |
| •650               | 584            | 717            | 674           | 553            | 430            | 515              | 667                | <b></b> 783   | <b>~</b> •797  | 693          |
| ♦750               | 424            | 663            | 702           | 649            | ~.550          | 5.33             | 480                | 707           | 850            | 746          |
| •850<br>000        | 187            | 046            | 617           | 648            | 557            | -•436            | ··•281             | 404           | 764            | 738          |
| • 900              | 142            | 012            | 197           | 611            | <b></b> 583    | 392              | <b>~.231</b>       | -•304         | -•579          | 738          |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (e)  $\alpha = -9.8^\circ$ ; M = 0.92

| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   |
|---|
| .908  |
| -053 -885 -1.178 -91 -149 -737 -1.088 -89 -174 -509 -1.019 -77 -207 -469 -932 -73 -290 -336 -701 -65 -380 -411 -322 -56 -473 -473 -149 -48 -548 -463 -219 -43 -566 -231 -260 -39 -063 -085 -131 -37 -057 -366 -595 -77 -159 -137 -340 -52 -178 -030 -194 -35 -178 -030 -194 -35 -207 -661 -064 -20 -288 -169 -051 -07 -368 -287 -192 -07 -472 -390 -285 -18 -536 -485 -424 -346 -271 -550 -425 -346 |
| -053 -885 -1.178 -91 -149 -737 -1.088 -89 -174 -509 -1.019 -77 -207 -469 -932 -73 -290 -336 -701 -65 -380 -411 -322 -56 -473 -473 -149 -48 -548 -463 -219 -43 -566 -231 -260 -39 -063 -085 -131 -37 -057 -366 -595 -77 -159 -137 -340 -52 -178 -030 -194 -35 -178 -030 -194 -35 -207 -661 -064 -20 -288 -169 -051 -07 -368 -287 -192 -07 -472 -390 -285 -18 -536 -485 -424 -346 -271 -550 -425 -346 |
| 149737 -1.08889174509 -1.019772074699327329033670165380411322564734731494854846321943566331260393211951883906308613137 0572665957715913734052178030194352070610642020816905107368287192074723902851853648542436827155042636   |
| -174509 -1.019772074699327329033670165380411322564734731494854846321943566331260393211951883906308613137 057366595771591373405217803019435178030194352070610642028816905107368287192074723902851853344736827536485424346271520426366  |
| 29033670165<br>38041132256<br>47347314948<br>54846321943<br>56633126039<br>32119518839<br>06308613137<br>057 .366 .595 .77<br>159 .137 .340 .52<br>178 .030 .194 .35<br>178 .030 .194 .35<br>207061 .064 .20<br>298169051 .07<br>36828719207<br>47239028518<br>536485424346<br>27152042636  |
| 380411322564734731494854846321943566331260393211951883906308613137 057 .266 .595 .77159 .137 .340 .52178 .030 .194 .35207061 .064 .20288169051 .0736828719207472390285185364873682753648542436827152042636  |
| 4734731494854846321943566331260393211951883906308613137 05726659577159137340521780301943520706106420298169051073682871920747239028518536487368275364854243427152042636  |
| 54846321943<br>56623126039<br>32119518839<br>06308613137<br>057 .366 .595 .77<br>159 .137 .340 .52<br>178 .030 .194 .35<br>207061 .064 .20<br>298169051 .07<br>36828719207<br>47239028518<br>536485424368<br>27152042636  |
| 56623126039<br>32119518839<br>06308613137<br>057 .266 .595 .77<br>159 .137 .340 .52<br>178 .030 .194 .35<br>207061 .064 .20<br>298169051 .07<br>36828719207<br>47239028518<br>536485424346<br>271520426366  |
| 06308613137 057 .366 .595 .77159 .137 .340 .52178 .030 .194 .35207061 .064 .20298169051 .073682871920747239028518536447368275364854243427152042636  |
| 057   |
| -159 137 340 52<br>-178 030 194 35<br>-207 -061 064 20<br>-288 -169 -051 07<br>-368 -287 -192 -07<br>-472 -390 -285 -18<br>-533 -447 -368 -27<br>-536 -485 -424 -34<br>-271 -520 -426 -36   |
| -159 137 340 52<br>-178 030 194 35<br>-207 -061 064 20<br>-288 -169 -051 07<br>-368 -287 -192 -07<br>-472 -390 -285 -18<br>-533 -447 -368 -27<br>-536 -485 -424 -34<br>-271 -520 -426 -36   |
| 178   |
| 207061 -064 -20<br>288169051 -07<br>36828719207<br>47239028518<br>53344736827<br>53642542434<br>271552042636  |
| -0.288 -0.169 -0.051 0.07<br>-0.368 -0.287 -0.192 -0.07<br>-0.472 -0.390 -0.285 -0.18<br>-0.533 -0.447 -0.368 -0.27<br>-0.536 -0.485 -0.424 -0.34<br>-0.271 -0.520 -0.426 -0.36   |
| 47239028518<br>53344736827<br>53648542434<br>27152042636  |
| 53344736827<br>53648542434<br>27152042636   |
| 53648542434<br>27152042636  |
| 27152042636   |
|   |
| 02346844943   |
| z/b <sub>v</sub> = 0.93   |
|   |
| •833 •744 •541 •27  |
| 541 -1.12987846   |
|   |
| 728 -1-21683045<br>73885083446  |
|   |
|   |
|   |
| 78364432848   |
| 57758450948<br>41854456141  |
| 346510 <u>5554</u>  |
|   |
| 393 .130 .466 .73   |
| -•709 -•293 •021 •28  |
| -•667 -•376 <b>-</b> •200 •04   |
|   |
|   |
|   |
|   |
| -•701 <b>-•</b> 871 <b>-•</b> 787 <b>-•6</b>  |
| 70187178761<br>5989108537<br>3806898267   |
|   |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION (F THE WING, FUSELAGE, VERTICAL TAIL, AND HORDONTAL TAIL. HORIZONTAL TAIL IN THE FOR VARD POSITION;  $i_t = -6^\circ$  - Continued (f)  $\alpha = 0^\circ$ ; M = 0.60

|     |              |                |                | Cp 1        | for-          |                      |            |                                | op for         | _            |              |
|-----|--------------|----------------|----------------|-------------|---------------|----------------------|------------|--------------------------------|----------------|--------------|--------------|
|     | <b>x</b>     | B = -3.9°      | B=0°           |             | B=7.90        | B=12.7°              | B=-3.9°    | Į*                             | 1/-            | 1/           | B=12.7°      |
| -   | x   C,       |                | 2/0            | by = 0.1    | /             |                      |            | Z/                             | $b_V = 0.3$    | 38           |              |
|     | •            |                |                |             | ***           | Left s               | ide        |                                |                |              |              |
| -   |              | 411            | •605           | .664        | 455           | -1.262               | •287       | •286                           | •751           | -,386        | 987          |
|     | 000          | •611<br>•277   | •275           | 103         | -1.117        | -1.934               | 344        | .339                           | 091            | -1.057       | 987          |
|     | 075          | .130           | •132           | 117         | 675           | -1.470               | •151       | •153                           | 139            | 927          | - 971        |
|     | 150          | •031           | •036           | 144         | 474           | 812                  | •048       | •050                           | 158            | 682          | 890<br>823   |
|     | 250          | •015           | •013           | 110         | 300           | 422                  | 024        | 026                            | -•171<br>-•206 | 420<br>344   | - 715        |
|     | 350          | 033            | 042            | 128         | 240           | 345<br>306           | 088<br>127 | 085<br>127                     | 222            | 302          | - 595        |
|     | 450          | 079            | 079            | 151<br>133  | 217<br>170    | -•308                | -132       | -129                           | 194            | 25B          | 486          |
|     | •550<br>•650 | 081<br>065     | 079<br>062     | 094         | 131           | 251                  | 113        | 108                            | 155            | 221          | - 422        |
|     | 750          | 038            | 037            | 043         | 089           | 172                  | 065        | 069                            | 094            | 166          | 350          |
|     | 850          | •008           | •006           | .016        | 029           | 096                  | •002       | 001                            | 009            | 092          | 271          |
|     | 900          | •031           | •034           | .046        | 001           | 050                  | •027       | •029                           | •030           | 041          | 214          |
|     |              |                |                |             |               | Right                | side       |                                |                |              |              |
|     | .025         | 481            | 480            | 028         | .610          | .821                 | 661        | 659                            | 069            | .607         | •731         |
| 1   | 075          | 403            | 407            | 119         | .350          | •542                 | 465        | 466                            | 128            | .362         | •523         |
|     | •150         | 327            | 317            | 133         | .214          | •371                 | 369        | 368                            | 149            | •216         | •375         |
|     | • 250        | 238            | 239            | 117         | •128          | •257                 | 318        | 324<br>306                     | -•167<br>-•192 | •110<br>•033 | •239<br>•154 |
|     | • 350        | 221            | 214            | 135         | •054          | •158                 | 316<br>258 | <b>-</b> •308<br><b>-</b> •260 | 192            | 048          | 038          |
|     | 450          | 212            | 207            | 153         | 013           | •080<br>• <b>054</b> | 263        | -•260<br>-•260                 | 196            | 071          | •017         |
|     | •550         | 159            | 161<br>113     | 126<br>091  | 025<br>015    | •040                 | 192        | 186                            | 146            | 059          | 001          |
|     | •650         | -•111<br>-•061 | -•115<br>-•049 | 041         | •001          | •036                 | 109        | 101                            | 078            | 034          | 001          |
|     | .750<br>.850 | •020           | •018           | •025        | •038          | •057                 | 012        | 007                            | •018           | •017         | •010         |
|     | •900         | •048           | •041           | .052        | •050          | •052                 | •022       | •027                           | •036           | •017         | 013          |
| -   |              |                | 2/             | by = 0.     | .66           |                      |            | Z/b                            | v =0.93        | •            |              |
|     |              |                |                |             |               | Left                 | side       |                                |                |              |              |
| 1   | 000          | <b>185</b>     | •188           | .742        | 305           | 650                  | .358       | •364                           | .660           | •045         | 382          |
| - ( | •000<br>•025 | •374           | • 373          | 142         | 974           | 763                  | .266       | .272                           | 738            | 490          | 447          |
|     | 075          | 162            | •165           | 183         | -4904         | 805                  | 038        | 033                            | 528            | 457          | 454          |
| 1   | •150         | •038           | •041           | 226         | 738           | 821                  | 212        | 202                            | 507            | 444          | 454          |
|     | .250         | 065            | 060            | 265         | 481           | 740                  | 240        | 232                            | -•457          | 448          | 472          |
| 1   | • 350        | 148            | 138            | 299         | 388           | ~•555                |            |                                |                |              |              |
|     | • 450        | 192            | 189            | 313         | 365           | 519<br>- #30         |            |                                |                |              |              |
|     | • 550        | 194            | 193<br>159     | 285<br>219  | 360<br>358    | 530<br>539           | 185        | 177                            | 224            | 439          | -•491        |
| - [ | •650<br>•750 | 159            | 111            | 119         | 351           | 525                  | 107        | 099                            | 110            | 432          | 456          |
| - 1 | • 850        | 028            | 028            | 048         | 321           | 468                  | 026        | 033                            | 021            | 388          | 410          |
|     | •900         | 008            | 010            | 014         | 295           | 447                  | •008       | •013                           | •025           | 363          | 389          |
|     |              |                |                |             |               | Righ                 | t side_    |                                |                |              |              |
|     | •025         | 900            | 881            | 089         | •617          | •719                 | -1.394     | -1.395                         | 496            | •580         | •816<br>•408 |
| ļ   | •075         | 587            | 583            | 164         | •381          | •528                 | -1.375     | -1.377                         | 505<br>445     | •172<br>•008 | •408<br>•204 |
| - 1 | 150          | 472            | -•468          | 187         | •228          | •382                 | -1.152     | -1.143                         |                | 1000         | 1204         |
|     | • 250        | 470            | 466            | 256<br>298  | •087<br>••018 | •239<br>•114         |            |                                |                |              |              |
| - 1 | • 350        | 463<br>421     | 468<br>416     | 288<br>292  | 018           | •022                 | -          |                                |                |              |              |
|     | •450<br>•550 | 355            | 351            | <b>2</b> 72 | 131           | 043                  | 1          |                                |                |              |              |
|     | •650         | 261            | 257            | 203         | 129           | 073                  | 182        | 175                            | 185            | 161          | 144          |
| - 1 | • 750        | 157            | 150            | 123         | 108           | 089                  | 123        | 122                            | 105            | 182          | 172          |
| -   | 850          | 040            | 037            | 018         | 069           | 098                  | 021        | 017                            | •000           | 143          | 156<br>179   |
| - } | •900         | •006           | •009           | •018        | 078           | -•128                | •025       | •027                           | •050           | 157          | -0117        |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORMONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (g)  $\alpha = 0^\circ$ ; M = 0.80

|                   |                |                | Cp             | for-                   |                |                |               | Cp for         | _              |                |
|-------------------|----------------|----------------|----------------|------------------------|----------------|----------------|---------------|----------------|----------------|----------------|
| x                 | B=-3.9°        | B=0°           | B=3.9°         | B=7.90                 | B=12.7°        | B=-39°         | B=0°          | B=3.9°         | B=7.9°         | B=12.70        |
| $\frac{x}{C_{v}}$ |                | Z/.            | by = 0.1       | 1                      | ···            |                | Z/            | by = 0.        | <del>3</del> 8 |                |
|                   |                | ia-            |                |                        | Left s         | ide            |               |                |                |                |
| •000              | •717           | •677           | •545           | •202                   | 275            | .498           | •780          | •561           | •088           | 361            |
| •025              | •279           | 076            | 521            | -1.111                 | -1.021         | •339           | 084           | 900            | -1.241         | - 663          |
| •075              | 146            | 101            | 365            | 828                    | 886            | •157           | 137           | 431            | -1.048         | 670            |
| •150<br>•250      | •042           | -•148<br>-•116 | 323<br>219     | 463                    | 790            | •057           | 157           | 333            | 811            | 687            |
| •250<br>•350      | 047            | 116<br>146     | 200            | ∞.281<br>228           | 637<br>531     | -•027<br>-•104 | 186<br>241    | -•291<br>-•303 | -•480<br>-•299 | 687<br>624     |
| 450               | 102            | 185            | 202            | 203                    | 471            | 174            | 284           | 303            | 240            | - • 531        |
| •550              | 108            | 165            | 158            | 162                    | 382            | 183            | 263           | 252            | 217            | 445            |
| •650              | 101            | 128            | 110            | 127                    | 295            | 166            | 208           | 190            | 217            | 367            |
| •750              | 065            | 071            | 051            | 091                    | 223            | 108            | ~.111         | 112            | 188            | 303            |
| 900               | -•004<br>•028  | •005<br>•046   | .018<br>.054   | ~•038<br>~•001         | -•140<br>-•091 | 018<br>.025    | -•007<br>•042 | -•017<br>•032  | -•121<br>-•071 | 254<br>226     |
| •,,,,             |                | 1040           | •••            | -8001                  | Right          | side           |               | •032           |                | 1210           |
| •025              | 416            | •002           | •331           | •599                   |                | 957            | 042           | •372           | •605           | .745           |
| 075               | 393            | 101            | 138            | 4356                   | •818<br>•550   | -428           | 122           | 161            | •371           | 535            |
| •150              | 320            | 131            | •051           | .219                   | ∙385           | 347            | 145           | •062           | .233           | <b>₃380</b>    |
| •250              | 231            | 117            | •012           | •143                   | •275           | 292            | 174           | 019            | .122           | •261           |
| • 350             | 217            | 150            | 051            | •058                   | •169           | 300            | 220           | 091            | •032           | 160            |
| •450<br>•550      | 209<br>166     | 182<br>159     | 107<br>110     | -•019<br>-•044         | ∙072<br>•034   | 269<br>266     | 231<br>255    | -•141<br>-•181 | 056<br>098     | •045<br>•009   |
| •650              | 105            | <b></b> 117    | 091            | 048                    | •008           | 185            | <b>-</b> •189 | 153            | 106            | 038            |
| •750              | ~.042          | 061            | 057            | 039                    | 006            | 097            | 091           | 086            | ~.077          | 047            |
| •850              | •028           | •020           | •015           | •011                   | •011           | ●004           | •013          | •000           | 024            | 047            |
| •900              | €063           | +054           | •036           | •026                   | ●005           | •037           | •046          | •022           | 019            | 073            |
|                   |                | Z/             | $b_{\nu} = 0.$ | 66                     |                |                | 2/0           | ,=0.93         |                |                |
|                   |                |                | -              |                        | Left           | s ide          |               |                |                |                |
| •000              | •461           | •777           | .514           | .161                   | 364            | •648           | •742          | •555           | •403           | 107            |
| ●025              | •370           | -•111          | -1.040         | 694                    | <b>~.76</b> 5  | •175           | <b></b> 750   | 576            | 374            | 381            |
| •075              | •178           | -+165          | 521            | 702                    | 773            | 091            | 598           | 529            | 354            | 385            |
| •150<br>•250      | •042<br>••079  | 222<br>295     | 411<br>368     | <b>-</b> ∙656<br>-•457 | 776<br>765     | 286<br>300     | 592<br>535    | 492<br>474     | 352<br>355     | -•387<br>-•395 |
| •350              | 189            | 385            | 378            | - 330                  | 509            | 1 300          |               |                |                | - • 3 , 2      |
| • 450             | 281            | 436            | 376            | 340                    | 436            | 1              |               |                |                |                |
| •550              | 304            | 402            | 332            | 367                    | 437            | _              |               | _              |                |                |
| •650              | 249            | 258            | -•257<br>- 100 | -•389                  | 459            | -,272          | 208           | 335            | 387            | 434            |
| •750<br>•850      | -•148<br>-•059 | 134<br>029     | 188<br>123     | -•395<br>-•371         | 474<br>468     | 165<br>099     | 081<br>.017   | 327<br>288     | 378<br>357     | 428<br>405     |
| 900               | 039            | •013           | 084            | 348                    | -4459          | 076            | •057          | 245            | 337            | - 392          |
|                   |                |                |                |                        | Right          | <del></del>    |               |                | <u> </u>       |                |
| 025               | -1.073         | 047            | •403           | •619                   | •742           | 629            | 578           | •282           | •570           | 849            |
| 075               | 506            | 143            | .175           | •382                   | •553           | 592            | 641           | 110            | •164           | • 442          |
| •150              | 396            | 182            | •059           | .243                   | .408           | 607            | 517           | 225            | 003            | 226            |
| •250              | 399            | 280            | 06B            | •102                   | •265           | 1              |               |                |                |                |
| • 350             | 425            | 361            | 182            | 032                    | •131           | 1              |               |                |                |                |
| •450<br>•550      | 408<br>338     | 411<br>367     | 269<br>294     | 140<br>197             | <b>♦008</b>    | 1              |               |                |                |                |
| •650              | 254            | 251            | 242            | =•197<br>=•208         | -•078<br>-•128 | 246            | 183           | 197            | 217            | 192            |
| 750               | 171            | 128            | 152            | 173                    | 125<br>145     | 286            | 068           | 165            | 217            | - 214          |
| ♦850              | 067            | •005           | 042            | -112                   | 130            | 238            | •040          | 084            | 158            | 182            |
| •900              | 024            | •053           | 013            | 114                    | 162            | 200            | •080          | 071            | 161            | 194            |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (h)  $\alpha = 0^\circ$ ; M = 0.85

|                             |              |                | Cp             | for-           |                |              |                | Cp for        | -              |                |
|-----------------------------|--------------|----------------|----------------|----------------|----------------|--------------|----------------|---------------|----------------|----------------|
| ا بر ا                      | B=-3.9       | B=0°           | B=39°          | B=7.90         | B=12.70        | B=-3.9       | B=0°           | B=3.9°        | B=7.9°         | B=12.7°        |
| <del>x</del> <del>c</del> > | /            | 1'             | by = 0.1       | <u> </u>       |                | <u> </u>     |                | by = 0.       | 38             |                |
| ~                           |              |                | <u> </u>       | •              | Left s         | ide          | <u>-</u>       |               |                |                |
| <u> </u>                    |              |                |                |                | Leii 3         | Tue          |                |               |                |                |
| .000                        | <b>₽752</b>  | <b>.687</b>    | •585           | •301           | 120            | •553         | •794           | •603          | •203<br>-1•512 | 240<br>624     |
| •025                        | •282         | 058            | 510            | -1.037<br>834  | 993<br>833     | •334<br>•153 | 072<br>132     | -1.051<br>424 | -1.320         | 627            |
| •075<br>•150                | .149<br>.034 | -•101<br>-•154 | 375<br>345     | 604            | 736            | .053         | 152            | 348           | 541            | 651            |
| 250                         | 004          | 122            | 236            | 271            | 604            | 034          | 188            | 306           | 344            | - +656         |
| •350                        | 054          | 155            | 209            | 226            | 526            | 121<br>214   | -•248<br>-•322 | 313<br>315    | 306<br>272     | 610<br>543     |
| •450                        | 124          | -•195<br>-•196 | 219<br>176     | 219<br>178     | 491<br>421     | 247          | 338            | 266           | 235            | 474            |
| •550<br>•650                | 147<br>150   | -•175          | 127            | 146            | 340            | 244          | 275            | 204           | 221            | 404            |
| 750                         | 108          | 094            | 057            | 110            | 268            | 173          | 136            | 127           | 189            | 334<br>277     |
| <b>850</b>                  | 037          | 005            | .014           | 048            | 183            | 063          | -•012<br>•042  | 035<br>.014   | 120<br>074     | 246            |
| •900                        | 001          | •046           | •044           | 010            | Right          | 5 ide        |                | •014          |                |                |
|                             | L            |                |                |                |                | <del></del>  |                |               | 441            | 75.            |
| •025                        | -•386        | •009           | .334           | •601           | .830           | 943          | 051            | •370<br>•159  | •601<br>•365   | •754<br>•543   |
| •075                        | 398          | 105            | •139           | •355<br>•219   | •563<br>•393   | 467<br>351   | -•122<br>-•146 | •063          | •229           | 392            |
| •150<br>•250                | 344          | -•141<br>-•126 | •048<br>•011   | •146           | • 284          | 301          | 179            | 024           | •120           | •270           |
| •350                        | - 224        | 161            | 058            | •052           | •173           | 313          | 232            | 102           | •031           | •162           |
| •450                        | 227          | 201            | 124            | 034            | •070           | 281          | <b></b> 268    | 170<br>230    | -•074<br>-•132 | •037<br>-•024  |
| •550                        | 181          | -•192          | 140            | 068<br>077     | •026<br>-•011  | 273<br>201   | 315<br>251     | 214           | 150            | 067            |
| •650                        | 126<br>054   | 151<br>079     | 133<br>095     | 068            | -•011<br>-•031 | 107          | 112            | - 137         | 120            | 078            |
| .750<br>.850                | 022          | •016           | 015            | 014            | 013            | 016          | .010           | 031           | 056            | 071            |
| 900                         | 057          | .052           | .015           | •003           | -•021          | •024         | •050           | 001           | 047            | 103            |
| 1                           |              | Z,             | $b_v = 0$      | .66            |                |              | 2/0            | v = 0.93      |                |                |
|                             |              |                |                | <del></del>    | Left           | side         |                |               |                |                |
| .000                        | •516         | •792           | •565           | .180           | 253            | •710         | .794           | <b>.615</b>   | .439           | 027            |
| •025                        | •372         | 087            | -1.131         | 797            | 736            | .214         | 659            | 467           | 369            | 383            |
| 075                         | 183          | 145            | 437            | 800            | 747            | 097          | 574            | 454           | 353            | -:384<br>-:388 |
| •150                        | •047         | 202            | 414            | -∙702<br>-•502 | -•751<br>-•776 | 294          | 649<br>619     | 420<br>407    | 346<br>353     | 397            |
| •250                        | 081          | 285<br>403     | 349<br>362     | 298            | 506            |              | ***            | • • • • •     | ****           | •=             |
| •350<br>•450                | 324          | 510            | 368            | 316            | 433            |              |                |               |                |                |
| 550                         | 414          | 537            | 326            | 356            | 433            |              | _ 244          | 444           | 267            | 427            |
| •650                        | 427          | 365            | 267            | 385<br>300     | 451            | 401<br>210   | -•241<br>-•118 | 346<br>344    | 387<br>386     | 426            |
| a750                        | 220<br>103   | -•126<br>-•022 | 214<br>157     | -•399<br>-•390 | 467<br>464     | 146          | 014            | 316           | 364            | 410            |
| •850<br>•900                | 070          | •022           | 128            | 379            | 464            | 126          | •032           | 298           | 351            | 400            |
| 1                           | 1            |                |                |                | Righ           | t side       |                |               |                |                |
| •025                        | -1.094       | 041            | •407           | •630           | •756           | 421          | 523            | +288          | 592            | .867           |
| 075                         | 397          | <b>-</b> ₀135  | •180           | • 394          | .564           | 411          | 687            | 107           | •182           | •452           |
| •150                        | 394          | 172            | •065           | •252           | •419<br>•273   | -•428        | 594            | 219           | •002           | •236           |
| •250                        | 370          | 282<br>405     | 067<br>204     | •107<br>-•035  | •273<br>•132   | 1            |                |               |                |                |
| •350<br>•450                | 381<br>381   | 487            | 313            | 159            | 004            |              |                |               |                |                |
| •550                        | 327          | 526            | 368            | 248            | 107            |              | 242            | . 222         | _ 11^          | 231            |
| •650                        | 258          | 332            | 377            | 283            | 168            | 338<br>333   | 248<br>116     | 332<br>213    | 330<br>235     | - • 243        |
| • 750                       | 198          | 132            | -•223<br>-•075 | 241<br>137     | -•191<br>-•151 | 304          | •016           | 113           | 162            | 194            |
| •850<br>•900                | 126          | •009<br>•060   | 044            | 137            | 180            | 278          | .065           | 102           | 166            | 204            |
| . 900                       | 1 - 1070     | 5000           | 2077           |                |                |              |                | <del></del>   |                |                |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (i)  $\alpha = 0^\circ$ ; M = 0.90

|                   |                |                |               | for-                                  |                |                                       |                | Cp for                | <del>-</del> |                |
|-------------------|----------------|----------------|---------------|---------------------------------------|----------------|---------------------------------------|----------------|-----------------------|--------------|----------------|
| <u>x</u>          | B = -3.9       | B=0°           | B=3.9°        | B=7.9°                                | B=12.7°        | B=-3.9°                               |                | B=39°                 |              | B=1279         |
| $\frac{x}{c_{v}}$ |                | Z              | bv = 0.1      | 1                                     | <del></del> -  |                                       | 2/             | by = 0.3              | 38           | n              |
|                   |                |                |               | · · · · · · · · · · · · · · · · · · · | Left s         | ide                                   |                |                       |              |                |
| •000              | ●780           | •693           | •638          | •407                                  | •018           | •603                                  | •808           | +664                  | •327         | 137            |
| •025              | •300           | 042            | 458           | 958                                   | 986            | •349                                  | 060            | 944                   | -1.309       | 588            |
| •075<br>•150      | •167<br>•053   | 085<br>146     | 367<br>354    | 766                                   | 806            | •172                                  | 129            | 499                   | -1.170       | 599            |
| 250               | 027            | 117            | 218           | 628<br>368                            | -•700<br>-•573 | •074<br>-•010                         | ~•149<br>-•175 | 323<br>284            | -1.038       | 620            |
| •350              | 040            | 149            | 202           | 188                                   | -•502          | 106                                   | 238            | 207                   | 217<br>291   | 631<br>588     |
| • 450             | ~•115          | 208            | <b>~.21</b> 5 | 194                                   | 472            | 205                                   | 323            | 304                   | 247          | 529            |
| ♦550              | 146            | 220            | 174           | 170                                   | 414            | 251                                   | <b></b> 370    | 273                   | 223          | - 464          |
| •650              | 178            | 220            | 132           | 148                                   | -•351          | 286                                   | 388            | 203                   | 225          | 409            |
| •750<br>•850      | -•158<br>-•071 | 134<br>011     | 054<br>.022   | 117<br>054                            | -•284<br>-•208 | 281                                   | 180            | 120                   | 209          | -+343          |
| 900               | 012            | •044           | •058          | 034<br>018                            | 161            | 122<br>033                            | 002<br>.051    | <b>~.</b> 027<br>•021 | 150<br>096   | -•291<br>-•254 |
|                   |                |                |               | •010                                  | _              | side                                  | •031           | •021                  |              | - 6294         |
| •025<br>•075      | 337            | •021           | •350          | •614                                  | •847           | 896                                   | 038            | •383                  | •602         | •769           |
|                   | -+401          | 094            | •156          | •365                                  | •580           | 561                                   | 119            | •175                  | •374         | 556            |
| •150              | 349            | 134            | •060          | •233                                  | •412           | <b>-</b> •3 <b>5</b> 2                | 139            | •076                  | .241         | •409           |
| • 250<br>• 350    | 235<br>216     | 123            | •025          | • 156                                 | •302           | 271                                   | 169            | 005                   | •132         | 280            |
| 450               | 219            | 158<br>211     | 045<br>121    | •062<br>••030                         | •187           | 301                                   | 224            | ~•084                 | •043         | •176           |
| •550              | 173            | 224            | 151           | 076                                   | ∙084<br>•023   | -•266<br>-•275                        | 278<br>351     | 164<br>242            | 068<br>143   | •051<br>-•024  |
| a650              | 121            | 204            | 160           | 099                                   | 017            | 194                                   | -•378          | 283                   | 185          | 079            |
| •750              | 051            | 121            | 144           | 116                                   | 058            | 103                                   | 158            | 223                   | 188          | 109            |
| •850              | •030           | •002           | 037           | 053                                   | 044            | 014                                   | <b>• 00</b> 8  | 078                   | 126          | 117            |
| •900              | •065           | •044           | 001           | 033                                   | 063            | •025                                  | •049           | 023                   | 103          | 147            |
|                   |                |                | $b_{V} = 0.6$ | 56                                    |                |                                       | Z/DV           | =0.93                 |              |                |
|                   |                |                | ·             |                                       | Left           | s ide                                 |                |                       |              |                |
| •000              | +564           | •809           | •622          | .280                                  | 148            | <b>474</b> 9                          | •836           | •681                  | •493         | .057           |
| •025<br>•075      | ●390<br>●205   | 064<br>122     | ~1.045        | 805                                   | 693            | +246                                  | 543            | 652                   | 348          | 373            |
| 150               | •073           | -•122<br>-•176 | 821<br>323    | -•786<br>-•690                        | -•697<br>-•702 | 052                                   | 536            | -•355                 | 334          | 374            |
| •250              | 047            | 250            | 342           | 452                                   | -•758          | ~•263<br>~•252                        | 609<br>635     | 343<br>346            | 330<br>334   | 374<br>383     |
| •350              | 178            | 380            | 308           | 311                                   | 538            | • - > -                               | 1000           | -0340                 | 6 5 5 4      | - 6 303        |
| • 450             | 313            | 507            | 367           | 322                                   | 420            |                                       |                |                       |              |                |
| •550              | 389            | 592            | 316           | 352                                   | 412            |                                       |                |                       |              |                |
| •650<br>•750      | 483<br>508     | 588<br>104     | -4249         | 379                                   | 428            | 774                                   | 280            | 320                   | 367          | 408            |
| 850               | 212            | •000           | 205<br>160    | 394<br>391                            | 441<br>447     | 591<br>199                            | -•207<br>-•134 | 321<br>303            | 369          | - 409          |
| 900               | 088            | •031           | 143           | 387                                   | 451            | 161                                   | 102            | -•285                 | 352<br>344   | 404<br>398     |
|                   |                |                |               | -                                     | Right          | · · · · · · · · · · · · · · · · · · · |                |                       | • • • • •    | • > > >        |
| •025              | -1.022         | 021            | •430          | •639                                  | •771           | 299                                   | 447            | •323                  | .421         | . 002          |
| •075              | 768            | 118            | • 207         | •407                                  | 586            | 326                                   | 647            | 074                   | •621<br>•207 | •882<br>•481   |
| •150              | 299            | 150            | ∙096          | •268                                  | •440           | 333                                   | 577            | 185                   | .029         | 261            |
| •250              | 385            | 247            | 040           | •125                                  | •294           |                                       |                |                       |              |                |
| •350<br>•450      | -•310<br>-•362 | -•384<br>-•497 | 175<br>288    | 018<br>152                            | •151           |                                       |                |                       |              |                |
| •550              | 307            | 559            | 417           | -•152<br>-•250                        | 106            |                                       |                |                       |              |                |
| •650              | 247            | 592            | 445           | 337                                   | 188            | 315                                   | 343            | 707                   | 643          | 471            |
| •750              | 200            | 142            | 477           | 379                                   | 283            | 313                                   | 269            | -454                  | 627          | 482            |
| •850              | 137            | •017           | 150           | 324                                   | 254            | 299                                   | 157            | 179                   | 194          | 191            |
| •900              | -•114          | •056           | 062           | 220                                   | 223            | 281                                   | 096            | 148                   | 155          | 179            |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF ''HE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (j)  $\alpha = 0^\circ$ ; M = 0.92

|                    | T              |                       | _            | 6                |                |                |                |                |                  |                |
|--------------------|----------------|-----------------------|--------------|------------------|----------------|----------------|----------------|----------------|------------------|----------------|
|                    | 10 30          | 4 0                   | Cp           | for-             |                |                |                | Cp for         | _                |                |
| X   C <sub>V</sub> | N = -3.9       | B=0°                  |              |                  | · B=12.7°      | B=-3.9         | β=0°           | B= 3.90        | B=7.9°           | B=12.70        |
| ٧,                 |                |                       | bv =0        | .//              |                |                | Z/             | by = 0.        | 38               |                |
|                    | L              |                       |              |                  | Left s         | ide            |                |                |                  |                |
| •000<br>•025       | •787<br>•302   | •699<br><b>-</b> •033 | •656         | • 452<br>• 925   | •058           | •625           | .818           | •680           | •375             | 112            |
| 075                | 170            | 076                   | 454<br>385   | 738              | -•963<br>-•812 | •348<br>•172   | 054<br>119     | 930            | -1.241           | 617            |
| •150               | •057           | 140                   | 365          | 625              | 718            | •076           | -,136          | 672<br>391     | -1.119<br>-1.012 | 628            |
| <b>♦250</b>        | •028           | 108                   | 234          | -1498            | 601            | 002            | 165            | 281            | 497              | ~•649<br>-•650 |
| •350               | 034            | 143                   | 212          | -•265            | -•528          | 096            | 225            | 319            | 126              | 605            |
| •450<br>•550       | 119            | 198                   | 231          | 163              | 483            | 199            | 301            | 304            | 210              | 544            |
| 650                | 150<br>195     | 214<br>228            | 184<br>142   | 155              | 414            | 250            | 361            | 291            | 233              | 483            |
| 750                | 202            | -1157                 | 063          | 155<br>131       | ~•357<br>-•291 | 313<br>313     | -+407          | 220            | 247              | 415            |
| .850               | 109            | 005                   | •015         | ~•072            | ~•226          | 209            | 267<br>.011    | -•127<br>-•035 | 228              | 357            |
| •900               | 039            | •052                  | •052         | 037              | 186            | 078            | •068           | +014           | -•178<br>-•130   | 316<br>284     |
|                    |                |                       |              |                  | Right          | side           |                |                |                  | - # 2 8 4      |
| •025               | 322            | •033                  | •350         | .615             | •845           | 885            | -,026          | •379           | •603             | •772           |
| •075               | 404            | 083                   | •159         | • 369            | •578           | 628            | - 103          | •175           | .375             | 558            |
| •150<br>•250       | 373            | 124                   | •063         | •232             | •411           | 362            | - 127          | •075           | • 245            | •410           |
| •350               | 247            | 113                   | .022         | 156              | •302           | 266            | - 154          | 004            | •134             | <b>₽2.82</b>   |
| 450                | 227            | 152<br>201            | 047<br>123   | •060<br>-•032    | ∙187<br>•082   | 295            | - 214          | 089            | •042             | •176           |
| •550               | 181            | 226                   | 160          | 083              | •022           | 280<br>277     | - 272<br>- 353 | 171<br>246     | 072              | •050           |
| •650               | 124            | 214                   | 172          | 117              | 028            | 202            | 393            | - 1246         | 150<br>202       | 027<br>090     |
| •750               | 055            | 149                   | 186          | 159              | 082            | 102            | 238            | - 295          | 233              | -130           |
| .850               | •025           | •000                  | 073          | 105              | 073            | 017            | .014           | 129            | 197              | 153            |
| •900               | ●059           | •052                  | 023          | 084              | 098            | •020           | - 061          | 058            | 184              | 198            |
|                    |                |                       | $b_{v} = 0$  | .66              |                |                | Z/b            | =0.93          |                  |                |
|                    |                |                       |              |                  | Left           | s ide          |                |                |                  |                |
| •000               | ●586           | <b>.82</b> 2          | +644         | .316             | 130            | •770           | .852           | •700           | •514             | .086           |
| •025               | •397           | 053                   | -1.031       | -1.054           | 728            | •258           | -, 535         | 784            | 351              | - 393          |
| •075<br>•150       | <b>≥220</b>    | 109                   | 840          | 946              | 740            | 039            | <b>~.</b> 520  | 335            | 341              | 389            |
| 250                | •086<br>-•037  | -•164<br>-•232        | 312<br>351   | 674<br>500       | 760            | 244            | -,594          | -4335          | 340              | 392            |
| •350               | 172            | 361                   | ~.277        | 302              | 665<br>471     | -•259          | 628            | 340            | 345              | 398            |
| 450                | 312            | 489                   | - 360        | 334              | 431            |                |                |                |                  | l              |
| +550               | 391            | 583                   | 356          | 357              | 437            |                |                |                |                  | 1              |
| •650               | 484            | 602                   | - 4246       | 376              | 455            | 772            | 275            | 317            | 371              | 423            |
| •750               | 526            | 174                   | 214          | 393              | ~•466          | <b>-</b> •719  | 213            | 320            | 371              | - 425          |
| •850<br>•900       | 481            | •023                  | 175          | 403              | 464            | 370            | 162            | 305            | 359              | - 413          |
| ••••               | -•248          | •047                  | 158          | -+404            | 468            | 222            | 136            | <b>-</b> €296  | 354              | 410            |
| .025               | 993            | .000                  |              |                  | Right          |                |                |                |                  |                |
| 075                | -4993<br>-4785 | •000<br>-•095         | •431<br>•212 | •637<br>•410     | •774<br>•586   | 272<br>307     | 412            | •330           | •630             | 986            |
| •150               | 263            | 133                   | •102         | • <del>-10</del> | • 443          | 316            | -•521<br>-•563 | 065<br>180     | •217             | 480            |
| •250               | 357            | 230                   | 031          | 131              | 297            |                | 1 20 3         | -1180          | •042             | •260           |
| •350               | 287            | 361                   | 171          | 013              | •150           |                |                |                |                  | 1              |
| •450               | 344            | 482                   | 287          | 147              | •006           |                |                |                |                  | i i            |
| •550               | 338            | 551                   | 414          | 248              | 113            |                |                |                |                  | 1              |
| •650<br>•750       | -•238<br>-•213 | -+586                 | 458          | 341              | 197            | ~•305          | 344            | 740            |                  | 478            |
| 850                | -0154          | -•267<br>•020         | 521          | 430<br>301       | 287            | 314            | -•293          | 638            | -4658            | 520            |
| 900                | 141            | •066                  | 315<br>134   | -•391<br>-•418   | -+307<br>-+349 | -•303<br>-•304 | ~• 201         | 266            |                  | - 386          |
|                    |                |                       |              | 4410             | -0277          | 284            | 143            | 199            | 397              | 262            |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Continued (k)  $\alpha=9.4^\circ$ ; M=0.60

| Γ                                       |                |                |              | for-          |                |                  |               | Cp for         | _                |              |
|---|----------------|----------------|--------------|---------------|----------------|------------------|---------------|----------------|------------------|--------------|
| х                                       | B=-3.9         | B=0°           | B=3.9°       | B=7.9°        | B=12.70        | B=-3.9°          | B=0°          | B=39°          | B=7.9°           | B=12.70      |
| x C <sub>V</sub>                        | <u> </u>       |                | by = 0.1     |               | 15             | ·                | Z/            | by = 0.        | 38               |              |
| ľ                                       |                |                |              |               | Left s         | ide              |               |                |                  |              |
| •000                                    | •414           | •802           | •435         | 710           | -1.180         | •151             | •689          | •110           | 733              | -1.196       |
| •025                                    | 015            | 136            | 264          | 719           | -2.110         | •352             | 111<br>139    | 814<br>501     | -1.304<br>-1.240 | 993<br>968   |
| •075                                    | •027           | 136            | 340<br>335   | 530<br>434    | -1.021<br>633  | •172<br>•075     | -•148         | 374            | 922              | - 920        |
| •150<br>•250                            | -•012<br>-•008 | 162<br>111     | 248          | 304           | <b>418</b>     | •011             | 152           | -319           | 361              | 872          |
| 350                                     | 031            | 120            | 231          | 265           | ~.347          | 040              | 173           | 317            | 308              | 726          |
| 450                                     | 049            | 143            | 229          | 235           | 340            | 077              | <b>-</b> •192 | 298            | 290              | 573          |
| •550                                    | -4049          | 120            | 190          | <b>-</b> •208 | 283            | 079              | 166           | 238            | 254              | 454          |
| •650                                    | 029            | 086            | 137          | 176           | 215            | 065              | 129           | 183            | 219              | 379          |
| ●750                                    | 012            | 047            | 086          | 112           | 160            | 031              | 070           | 107            | -:167            | 315<br>242   |
| •850                                    | •024           | •002           | 017<br>.020  | 037<br>009    | -•089<br>-•053 | •020<br>•047     | 008<br>.038   | 015<br>.031    | 080<br>037       | 192          |
| •900                                    | •043           | •043           | •020         |               | Right          | side             | 1070          | •071           | - • • • • •      | ****         |
| •025                                    | 195            | 044            | •020         | •523          | •813           | 701              | 044           | •409           | •607             | •719         |
| 075                                     | 340            | 139            | .031         | •336          | 548            | 469              | 113           | •195           | •393             | .548         |
| •150                                    | 324            | 143            | 001          | •228          | •393           | 365              | 120           | •100           | • 256            | •409         |
| •250                                    | -+254          | 107            | 006          | •167          | •290           | 303              | 134           | •029           | •162             | .294         |
| •350                                    | 241            | 118            | 031          | •096          | •1 <b>9</b> 2  | 289              | 152           | 017            | •096             | •210         |
| • <b>45</b> 0                           | 224            | 139            | 047          | •034          | •114           | 273              | 171           | ~•056<br>~•070 | •032<br>•000     | •125<br>•078 |
| •550                                    | 190            | 116            | 042<br>024   | .014<br>.016  | •080<br>•066   | 231<br>167       | 159<br>111    | 045            | 002              | •057         |
| •650<br>•750                            | 139<br>077     | -•079<br>-•038 | •001         | •020          | • 052          | 091              | 042           | 012            | •004             | •039         |
| •850                                    | 003            | •031           | •045         | • 055         | •071           | •004             | .022          | 043            | .041             | .041         |
| 900                                     | 031            | 054            | 064          | .064          | •064           | .034             | .043          | .054           | •036             | •014         |
| • |                | Z              | by = 0.      |               |                | 1                | Z/b           | v = 0.93       |                  | -            |
|   |                |                |              |               | Left           | s ide            |               |                |                  |              |
| .000                                    | •006           | •666           | 059          | 573           | 829            | •296             | •691          | 280            | 178              | 628          |
| 025                                     | •398           | 132            | -1.128       | 975           | 692            | 488              | 564           | -1.188         | 464              | 450          |
| •075                                    | •216           | 150            | 621          | 909           | 715            | •151             | <b>-</b> •382 | -1.107         | 450              | 441          |
| •150                                    | •105·          | 175            | 469          | <b></b> 722   | 639            | 036              | 359           | 987            | 445              | 445          |
| •250                                    | •024           | <b>~•19</b> 2  | 413          | 514           | 582            | 077              | 320           | <b>7</b> 57    | 454              | 454          |
| • 350                                   | 042            | 221            | 402          | 418<br>386    | 559<br>537     |                  |               |                |                  |              |
| • 450<br>• 550                          | -•091<br>-•116 | 235<br>221     | 370<br>317   | 386           | 512            |                  |               |                |                  |              |
| •650                                    | 089            | 169            | 227          | 375           | 491            | 125              | 180           | 197            | 443              | 422          |
| 750                                     | 045            | 093            | 132          | 349           | 468            | 063              | 086           | 114            | 418              | - • 411      |
| 850                                     | 006            | 033            | 047          | 297           | 441            | 008              | 005           | 033            | 372              | 386          |
| •900                                    | •015           | •002           | 008          | <b>-</b> •258 | 432            | •015             | •031          | •008           | 349              | 381          |
|   |                |                |              |               |                | side             |               |                |                  |              |
| •025                                    | 994            | 035            | • 451        | •628<br>•425  | ∙694<br>•571   | -1.252<br>-1.123 | 254<br>325    | •580<br>•165   | •746<br>•365     | •950<br>•600 |
| •075<br>•150                            | 561<br>418     | 116<br>125     | .234<br>.130 | .425<br>.294  | •447           | -1.059           | 286           | •017           | .189             | •393         |
| • 250                                   | 400            | 166            | •045         | •185          | •336           |                  |               |                |                  |              |
| •350                                    | 393            | 203            | 024          | •093          | .237           | i                |               |                |                  |              |
| 450                                     | 358            | 219            | 072          | •016          | .144           |                  |               |                |                  |              |
| •550                                    | -•298          | <b>-•20</b> 3  | 093          | 025           | •064           |                  |               |                |                  |              |
| ●650                                    | 218            | -+157          | 077          | 039           | •018           | 169              | 129           | 072            | 082              | 043          |
| ▶750                                    | 123            | 079            | 040          | 037           | 018            | 095              | 079           | 056            | 119<br>105       | 119<br>135   |
| ▶850                                    | 019            | •006           | •029         | 018<br>032    | 043<br>089     | 003<br>.036      | •020<br>•052  | •024<br>•041   | 123              | 171          |
| 900                                     | •027           | •038           | •052         | -6032         |                | 1030             | 1072          | 8041           | - 1123           | - 0 4 / 1    |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Continued (1)  $\alpha=9.6^\circ$ ; M=0.80

|                            |               |             | Cp f                   | or-          |              |                  |              | p for                 |               |              |
|----------------------------|---------------|-------------|------------------------|--------------|--------------|------------------|--------------|-----------------------|---------------|--------------|
| <b>'</b>                   | B=-3.94       | B=0°        | B=3.9°                 | B=7.9°       | B=12.70      | B=-3.9°          |              |                       | B=7.9°        | B=12.7       |
| <u>x</u><br>C <sub>v</sub> | <del>/</del>  | <i>'</i>    | v = 0.1                | /            |              |                  | 2/1          | $b_V = 0.3$           | 38            |              |
| ~                          |               |             | <u> </u>               |              | Left s       | ide              |              |                       |               |              |
| 000                        | •370          | .858        | •414                   | 395          | 170          | •416             | •737         | •426<br>-•968         | 147<br>-1.179 | 640<br>802   |
| 025                        | 032           | 111         | 154                    | 580          | -1.251       | •341             | 093<br>136   | 493                   | -1.099        | 813          |
| 075                        | •025          | 128         | 314                    | 540          | 961          | •166             | 142          | 360                   | 900           | 722          |
| 150                        | 006           | 163         | 354                    | 483          | 733          | •080<br>•013     | -•159        | 302                   | 520           | - 690        |
| 250                        | 007           | 107         | 248                    | 329          | -•493<br>493 | 053              | -199         | 299                   | 333           | 633          |
| 350                        | <b>-•</b> 038 | 125         | -•233                  | 279<br>252   | 402<br>361   | 107              | 235          | 291                   | 283           | 552          |
| 450                        | 067           | 162         | 233<br>199             | 218          | 316          | 107              | 206          | 234                   | 255           | 480          |
| 550                        | 067           | 142         | 156                    | 189          | 263          | 095              | 163          | 186                   | 236           | 416          |
| 650                        | 047           | 108         | 091                    | 145          | 201          | 053              | 082          | 114                   | 196           | 364          |
| 750                        | 024           | 061<br>.010 | 022                    | 071          | 134          | 013              | •005         | 020                   | 119           | 304          |
| 850                        | •017          | •050        | .024                   | 028          | 080          | •051             | .050         | •032                  | 068           | 249          |
| 900                        | •049          | •090        |                        |              | Right        | side             |              |                       |               |              |
| 025                        | 095           | 016         | •000                   | .415         | •789         | -1.055           | 039          | •401                  | •611<br>•392  | •736<br>•561 |
| 075                        | 333           | 130         | .044                   | • 331        | . 540        | 452              | 102          | •192                  | 266           | .428         |
| 150                        | 342           | 143         | •020                   | •234         | • 395        | 357              | 120          | •100                  | 169           | 316          |
| 250                        | 259           | 105         | 002                    | •174         | •296         | 305              | 137          | •037<br><b>-</b> •022 | •095          | 228          |
| 350                        | 253           | 127         | 036                    | 095          | •196         | 303              | 171          | -•022<br>-•079        | •018          | 136          |
| 450                        | 250           | 154         | 062                    | •023         | •113         | 305              | 200<br>192   | 075                   | 024           | •081         |
| •550                       | 207           | 136         | 059                    | 002          | •084         | 265<br>191       | 143          | 080                   | 034           | .043         |
| .650                       | 158           | 091         | 039                    | 005          | •058         | 092              | 064          | 036                   | 025           | .028         |
| • 750                      | 087           | 052         | 019                    | 007          | •043         | •006             | .027         | •027                  | .012          | •020         |
| 850                        | •000          | •028        | •041                   | •032<br>•035 | ∙055<br>•045 | 043              | .054         | +041                  | 001           | 017          |
| • 900                      | •039          | •056        | $\frac{.054}{b_V = 0}$ |              |              | 1 - ***          |              | v = 0.93              | 3             |              |
|                            |               |             | Dy - 0                 | .00          | Left         | s ide            |              | <u> </u>              |               |              |
|                            | 200           | •696        | •306                   | 085          | 610          | •600             | .757         | •418                  | •129          | 380          |
| •000                       | 298           | 105         | -1.085                 | 655          | 680          | •420             | 620          | 771                   | 390           | - 4392       |
| •025                       | •391<br>•221  | 130         | 636                    | 685          | 745          | .108             | 444          | 465                   | 375           | 395          |
| .075                       | 1111          | 166         | 391                    | 654          | 604          | 081              | -,416        | 468                   | 378           | 402          |
| •150<br>•250               | 022           | 208         | - 331                  | 512          | 548          | 113              | 364          | 460                   | 384           | 414          |
| •350                       | 063           | 269         | 333                    | 410          | 507          |                  |              |                       |               |              |
| 450                        | 138           | 304         | 336                    | 372          | 486          |                  |              |                       |               |              |
| •550                       | 176           | 286         | 306                    | 381          | 472          |                  |              | - 214                 | 410           | 410          |
| 650                        | 142           | 203         | 240                    | 390          | 460          | 184              | 166          | 314<br>293            | 400           | - 399        |
| •750                       | 083           | 097         | 173                    | 381          | 448          | 103              | 050          | 253                   | 372           | - 370        |
| 850                        | 017           | 009         | 096                    | 350          | 423          | 049<br>027       | •037<br>•074 | - 225                 | 353           | - 35         |
| • 900                      | •006          | •034        | 060                    | -,329        | -,411<br>Dia |                  |              |                       |               |              |
|                            |               |             | 150                    | 420          | .733         | of side<br>- 831 | 313          | 495                   | •762          | •99          |
| •025                       | -1.038        | 016<br>094  | •450<br>•244           | •628<br>•436 |              | 708              |              | .112                  | .374          | 163          |
| •075                       | 547           | 094<br>114  | .144                   | 314          |              | 728              |              | 017                   | .194          | • 41         |
| •150<br>•250               | - 383         | 179         | .044                   | 207          |              | l                |              |                       |               |              |
| • 350                      | 411           | 245         | 046                    | .092         |              |                  |              |                       |               |              |
| a 450                      | 394           | 277         | 119                    | 005          | •149         | 1                |              |                       |               |              |
| •550                       | 325           | 266         | 154                    | 061          | •061         | -                |              |                       | 1.4.0         | - 61         |
| •650                       | 230           | 197         | 140                    | 088          |              | 231              |              | 143                   | 139           | 06           |
| .750                       | 133           | 091         | 086                    | 093          |              | 191              |              | 120                   |               | 13<br>14     |
| 850                        | 021           | •022        | 006                    | 064          |              | 135              |              | 057<br>048            | 138<br>155    | 14           |
|                            | 022           |             | .018                   | 078          |              |                  |              |                       |               |              |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_{t}=-6^{\circ}$  - Continued (m)  $\alpha=9.7^{\circ};~M=0.85$ 

|              |              |                |                          | for -          |                |               |                | Cp for         |              | · · · · · ·  |
|--------------|--------------|----------------|--------------------------|----------------|----------------|---------------|----------------|----------------|--------------|--------------|
| r            | B=-3.9°      | B=0°           | B=3.9°                   | B=7.9°         | B=12.70        | B=-3.9°       |                | B=3.9°         | B=7.9°       | B=127        |
| <u>x</u>     | <u> </u>     | Z/             | by = 0.1                 | 7              |                |               | Z/             | $b_V = 0.3$    | 3 <i>8</i>   |              |
| - <b>V</b>   |              |                |                          |                | Left s         | ide           |                |                |              |              |
| •000         | -349<br>-050 | -879<br>-108   | 420<br>109               | -•236<br>-•508 | 046<br>-1.154  | •478<br>•339  | •748<br>•099   | •500<br>-1•172 | -1.301       | 513<br>749   |
| 025<br>075   | •025         | -•127          | 311                      | 523            | 910            | .167          | 144            | 441            | -1.072       | 761          |
| 150          | 006          | 171            | 381                      | 525            | 723            | •076          | 147            | 354            | 808          | 722          |
| .250         | 013          | 117            | 256                      | 341            | <b>-</b> ∙536  | •013          | 164            | 300            | 526          | 696<br>651   |
| • 350        | 049          | 138            | 237                      | -•281          | 457            | 059           | -•221<br>-•272 | -•300<br>-•303 | 345<br>273   | 591          |
| • 450        | -•079        | 181            | 244                      | 256            | -•428<br>-•370 | 125<br>132    | 249            | 254            | - 241        | 526          |
| •550         | 076          | 165<br>140     | 207<br>165               | 216<br>187     | 328            | 125           | 204            | 200            | 229          | 468          |
| •650<br>•750 | 071          | 084            | 105                      | -e153          | 260            | 079           | 111            | 126            | 199          | + • 409      |
| • 850        | •010         | 005            | 027                      | 083            | 179            | 005           | 002            | 031            | 136          | 341          |
| 900          | •043         | .048           | .022                     | 042            | 135            | •037          | •051           | •025           | 088          | 298          |
| • / • •      |              |                |                          |                | Right          | side          |                |                |              |              |
| •025         | 042          | 007            | 030                      | *344           | •743<br>•497   | -1.010<br>437 | 032<br>104     | •394<br>•189   | •615<br>•402 | •727<br>•542 |
| •075         | 320          | 127            | .036<br>.018             | •307<br>•236   | •352           | 346           | 121            | •095           | •274         | 406          |
| •150<br>•250 | 347          | -•147<br>-•111 | 004                      | •182           | • 265          | 294           | 141            | .028           | .179         | 4297         |
| •350         | 248          | 133            | 046                      | •096           | •173           | 295           | 184            | 031            | •103         | • 206        |
| • 450        | 252          | 172            | 077                      | .024           | .087           | 298           | 225            | 095            | •014         | •109         |
| •550         | 211          | 161            | 077                      | 006            | •057           | 267           | 229            | 123            | 035          | •054         |
| .650         | 154          | -•11B          | 060                      | 018            | •024           | 191           | ~.181          | 109            | 053          | •014         |
| • 750        | 093          | 067            | 037                      | 022            | •005           | 096           | 084<br>.025    | 064<br>.010    | 045<br>012   | 011<br>024   |
| ·850         | 005          | •020           | •029                     | •018           | •014<br>-•004  | •003          | •025           | •026           | 022          | 072          |
| • 900        | •035         | •052           | $\frac{.045}{b_{V} = 0}$ | .028           |                | 1 .030        |                | v = 0.93       |              |              |
|              |              |                | 20 - 0                   | .00            | Left           | s ide         |                |                |              |              |
| .000         | •364         | •715           | •377                     | 022            | 539            | .669          | •783           | •502           | .214         | 331          |
| •025         | •389         | 108            | -1.208                   | 676            | 690            | •401          | 639            | 709            | 348          | 425          |
| 075          | .220         | 130            | 587                      | 707            | 729            | •091          | 474            | 391            | 337          | 425          |
| ·150         | •109         | 170            | 381                      | 669            | 687            | 106           | 447            | 391            | 343<br>351   | 431<br>445   |
| • 250        | •018         | 225            | 321                      | 515            | 713            | 125           | 362            | 394            | -6391        | :            |
| ●350         | 079          | 309            | 318                      | 364<br>333     | ~∙568<br>-•506 |               |                |                |              |              |
| • 450        | 169<br>227   | 359<br>392     | 329<br>308               | 353            | 494            | į.            |                |                |              |              |
| .550<br>.650 | 194          | 244            | 246                      | 371            | 494            | 227           | 174            | 313            | 384          | 458          |
| •750         | -119         | 110            | 187                      | 380            | 491            | 142           | 056            | 308            | 384          | 444          |
| 850          | 046          | 007            | 128                      | 370            | 476            | 086           | •038           | 286            | 365          | 421          |
| 900          | 022          | •038           | 095                      | 355            | -+467          | 072           | •076           | 263            | 355          | 412          |
|              |              |                |                          |                |                | t side        |                | 105            | •770         | .998         |
| 025          | -1.189       | •001           | •446                     | •639           | •724           | 599<br>512    | 313<br>423     | •485<br>•102   | •383         | 621          |
| •075         | 463          | 087<br>107     | •242<br>•146             | ●448<br>●328   | •595<br>•478   | 522           | ~• 343         | 027            | .202         | •401         |
| •150<br>•250 | 353<br>346   | 185            | .039                     | 217            | .361           | 1             |                |                |              |              |
| 350          | 369          | 268            | 063                      | .096           | .234           | 1             |                |                |              |              |
| • 450        | 374          | 329            | 148                      | 008            | •118           | 1             |                |                |              |              |
| •550         | 311          | 325            | 201                      | 085            | •022           |               |                | - 164          | 179          | 134          |
| .650         | 234          | 239            | 191                      | 120            | 049            | 280           | 138            | 190<br>155     | 179<br>199   | 19           |
| •750         | 154          | 107            | 126                      | 127            | 095            | 260<br>225    | 050<br>.062    | 086            | 162          | - 192        |
| e850         | 058          | •028<br>•072   | 031<br>011               | 090<br>109     | 102<br>151     | 194           | •099           | 086            | 179          | 221          |
| • 900        | 016          | <b>♦</b> 072   | 011                      |                |                | 1 174         | ••••           |                |              |              |

Table IV.- pressure coefficients for the combination of the Wing, fuselage, vertical tail, and horizontal tail. Horizontal tail in the forward position;  $i_t$  =  $-6^\circ$  - Continued

| (n)  | α =  | 9.70; | М   | = | 0.90 |
|------|------|-------|-----|---|------|
| (11) | uz - | ,     | TAT |   | 0.00 |

|                |                     |                       | Cp 1         | for-           |                |                |               | op for         |                  |              |
|----------------|---------------------|-----------------------|--------------|----------------|----------------|----------------|---------------|----------------|------------------|--------------|
| Y              | B=-39°              | B=0°                  | B=3.9°       | B=7.9°         | B=12.70        | B=-3.9°        |               | B=3.9°         | B=7.9°           | B=127        |
| <u>x</u>       | <del></del>         | Z                     | by = 0.1     | 7              |                |                | Z/            | $b_V = O.3$    | <i>38</i>        |              |
| •              |                     |                       | <u></u>      |                | Left s         | ide            |               |                |                  |              |
| •000           | •306                | •964                  | •440         | 126            | •080           | •534           | •750          | •563           | •170             | 373          |
| •025           | 079                 | 042                   | •020         | 393            | -•792          | •339           | 046<br>097    | 976<br>448     | -1.290<br>-1.026 | 621<br>620   |
| •075           | •025                | 071                   | 187          | 430            | 797<br>640     | •170<br>•080   | 109           | <b>373</b>     | 738              | - 626        |
| •150           | •003                | 130<br>097            | 347<br>256   | -•526<br>-•390 | 506            | •011           | <b></b> 135   | <b>-</b> •279  | 497              | 617          |
| • 250          | 009<br>052          | 120                   | -•236        | -•292          | 450            | 064            | 195           | 286            | 392              | - 4583       |
| • 350<br>• 450 | 091                 | 183                   | 257          | 281            | 424            | 145            | 271           | 322            | 307              | 535          |
| •550           | 100                 | 190                   | 236          | - 235          | 358            | 170            | 304           | 303            | 259              | 483          |
| •650           | 104                 | 204                   | 206          | 209            | ~.319          | 190            | 309           | 243            | 244              | 434          |
| • 750          | 086                 | 132                   | 140          | 168            | 259            | 150            | -•173         | 159            | 227              | 382          |
| .850           | 022                 | 026                   | 060          | <b></b> 109    | 175            | 051            | 013           | -•062          | <b></b> 172      | 325          |
| 900            | •018                | •032                  | 009          | 067            | 127            | •007           | •054          | 008            | -,125            | 287          |
|                |                     |                       | •            |                | Right          | side           |               |                |                  |              |
| .025<br>.075   | •043                | •055<br>•073          | 027          | • 284          | •760           | 954<br>532     | •013<br>-•065 | •400<br>•204   | •614<br>•405     | •754<br>•571 |
|                | 272                 |                       | .046         | • 326          | •516<br>•385   | 364            | 088           | 114            | • 284            | 436          |
| • 150          | <b>~•395</b>        | 113                   | •052<br>•033 | •276<br>•200   | •305<br>•295   | 276            | 116           | •042           | •184             | 331          |
| • 250          | 268                 | 088<br>120            | 014          | •109           | •204           | 295            | 173           | 025            | •101             | 237          |
| • 350          | -+255<br>-+268      | -•120<br>-•177        | 068          | •018           | •116           | - 309          | 237           | 104            | •005             | 143          |
| •450<br>•550   | 236                 | 199                   | ~.091        | 021            | .084           | - 295          | 274           | 154            | 056              | .075         |
| •650           | 180                 | -•170                 | 098          | 045            | •048           | 212            | 269           | 181            | 092              | •033         |
| .750           | 115                 | -123                  | 094          | 062            | •024           | 114            | 158           | 163            | 104              | •004         |
| 850            | 024                 | 013                   | 032          | 028            | .024           | 018            | 002           | 074            | 084              | 015          |
| •900           | •017                | •028                  | 005          | 024            | •007           | •019           | •044          | 042            | 087              | - 056        |
| •              |                     | Z                     | 1bv = 0      | .66            |                |                | Z/b           | v =0.93        | ·                |              |
|                |                     |                       |              |                | Left           | side           |               |                |                  |              |
| •000           | •422                | •721                  | •427         | •080           | 452            | 718            | .815          | •558           | .293             | 240          |
| •025           | 394                 | 053                   | -1.106       | 741            | 666            | .404           | 479           | 754            | 378              | 416          |
| 075            | 230                 | 084                   | 911          | 746            | 704            | •088           | 430           | <b>-</b> •358  | 349              | 388          |
| 150            | •120                | 123                   | 256          | 681            | 660            | 112            | 466           | 355            | 349              | 392          |
| • 250          | •021                | 178                   | <b>26</b> 9  | 541            | 644            | 114            | 421           | 361            | -•357            | - • 409      |
| • 350          | 084                 | 299                   | 304          | 344            | 508            | 1              |               |                |                  |              |
| · 450          | -•196               | 396                   | 351          | 342            | 459            |                |               |                |                  |              |
| • 550          | 298                 | 443                   | 339          | 367            | 453            |                | 24:           | 21-            | - 205            | - 620        |
| •650           | 310                 | 445                   | 265          | 381            | 454            | 574            | 244           | 317            | 385<br>381       | 419          |
| •750           | 256                 | 123                   | 217          | <b>-</b> •392  | -•456<br>- 443 | -•193<br>-•117 | 151<br>050    | -•314<br>-•299 | 381<br>368       | 411<br>393   |
| ·850           | 100                 | •003                  | 170          | 384            | 442<br>442     | 117            | •007          | 284            | 355              | 382          |
| •900           | -•059               | •052                  | 143          | 371            |                | t side         | 1007          |                |                  | - • 502      |
| 0.75           | 1 121               | 029                   | 463          | •639           | •760           | 393            | 274           | 499            | •769             | 1.017        |
| •025<br>•075   | -1 • 121<br>- • 829 | •038<br><b>-•0</b> 47 | •453<br>•261 | 455            | •623           | 391            | 441           | .116           | •38í             | .645         |
| •150           | 271                 | 073                   | 169          | 336            | •505           | 399            | 361           | 010            | •200             | •423         |
| 250            | 301                 | 160                   | 058          | 225            | •391           |                |               |                |                  |              |
| 350            | 333                 | 262                   | 052          | .099           | <b>.</b> 266   |                |               |                |                  |              |
| 450            | 375                 | 336                   | 162          | 017            | •153           |                |               |                |                  |              |
| •550           | 324                 | 408                   | 240          | 118            | •046           |                |               |                |                  |              |
| •650           | 243                 | 416                   | 312          | <b>-</b> •179  | 029            | 303            | 254           | -,566          | 441              | 132          |
| •750           | 188                 | 206                   | ~.322        | 250            | 086            | 301            | -•156         | 431            | 417              | 181          |
| .850           | 104                 | •029                  | 170          | 205            | 089            | 281            | 029           | 136            | 234<br>205       | 179          |
| •900           | 068                 | •074                  | 093          | 185            | 131            | 252            | .038          | 115            | - 6205           | - 4208       |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $t_t = -6^\circ$  - Continued (o)  $\alpha = 9.7^\circ$ ;  $t_t = -6^\circ$  - Continued (o)  $t_t = -6^\circ$ 

|                   | <del></del>      |                |                           |                       |         |                |                                 |                |                |        |
|-------------------|------------------|----------------|---------------------------|-----------------------|---------|----------------|---------------------------------|----------------|----------------|--------|
|                   |                  |                |                           | for-                  |         |                | _                               | Cp for         | _              |        |
| $\frac{x}{C_{v}}$ | 13 = - 3.5       | 9° B=0°        |                           | B=7.9°                | B=12.70 | B=-3.90        | B=0°                            | B=3.9°         | B=7.9°         | B=1270 |
| <sup>C</sup> v    | L                | z/             | bv = 0.                   | //                    |         |                | Z                               | by = 0.        |                | ٠٠.٠   |
|                   |                  |                |                           |                       | Left s  | ide            |                                 |                |                |        |
| •000              | •312             | •971           | •453                      | 173                   |         | •569           | •761                            | •588           | •176           |        |
| •025<br>•075      | 042<br>-058      | 025<br>054     | •044<br>-•166             | -•371<br>-•415        |         | ●356<br>●190   | 029<br>079                      | 959            | -1.302         |        |
| •150              | 045              | 106            | 325                       | 516                   |         | •097           | 079                             | 402<br>337     | -1.039<br>737  |        |
| ±250<br>250       | •021             | 068            | 227                       | 391                   |         | •025           | -•121                           | 271            | 502            |        |
| • 350<br>• 450    | 024              | 106<br>168     | 219<br>245                | -•297<br>-•279        |         | 050            | 182                             | 287            | 390            |        |
| •550              | 094              | 177            | 224                       | -•219<br>-•238        |         | -•138<br>-•167 | 258<br>296                      | -•317<br>-•291 | 301<br>256     |        |
| 650               | 105              | 188            | 194                       | 211                   |         | 200            | 291                             | 224            | -•248          |        |
| •750              | 094              | 121            | 127                       | 172                   |         | 175            | 167                             | 139            | 229            |        |
| •850<br>•900      | -•033<br>•010    | ~•016<br>•037  | 042<br>.003               | ~•115<br>-•072        |         | 067            | •001                            | 042            | 175            |        |
|                   |                  |                |                           |                       | Dish    | 007            | •056                            | •015           | 130            |        |
| •025              | <del></del>      |                |                           |                       | Right   | side           |                                 |                |                |        |
| 075               | -124             | •069<br>-•060  | •003<br>•073              | •282<br>•333          |         | 855<br>430     | •023<br>-•054                   | •413<br>•217   | •614<br>•405   |        |
| •150              | 307              | 095            | •068                      | .285                  |         | 323            | 077                             | •120           | •281           |        |
| •250              | 225              | 071            | •039                      | •199                  |         | 257            | 108                             | •054           | .180           |        |
| • 350<br>• 450    | 235              | 109<br>164     | 010<br>064                | •106<br>•019          |         | 285            | 157                             | 017            | •095           |        |
| 550               | 237              | 181            | 086                       | 024                   |         | -•300<br>-•306 | -•2 <b>26</b><br>-•2 <b>6</b> 2 | 094<br>144     | •002<br>-•060  |        |
| <b>♦65</b> 0      | 183              | 160            | 089                       | 053                   |         | 227            | 260                             | 162            | 102            |        |
| a750              | 120              | 117            | 081                       | 076                   |         | 117            | 144                             | 137            | 118            |        |
| ●850<br>●900      | -•020<br>•018    | •001<br>•033   | 017<br>.010               | 039<br>035            |         | 017            | •012                            | 045            | 093            |        |
|                   |                  |                | $\overline{b_{\nu}} = 0.$ |                       |         | •022           | •050                            | 015            | 101            |        |
|                   |                  |                | - U.                      |                       | 1       | <del></del>    | 2/0                             | -0.93          |                |        |
| •000              |                  |                | <del></del>               |                       | Left    | s ide          |                                 |                |                |        |
| •025              | •443             | •731<br>••039  | •466<br>1•076             | •088<br><b>-</b> •742 |         | •721<br>•399   | •822                            | •583           | • 303          |        |
| •075              | •240             | 070            | 847                       | -•742<br>-•740        | ļ       |                | -•456<br>-•416                  | 768<br>349     | 382<br>354     |        |
| •150              | •133             | 110            | 264                       | 682                   | Ī       |                | 454                             | -350           | 358            |        |
| • 250             | •028             | ~•171          | 268                       | 569                   |         | 102            | -•413                           | 357            | 358            | į      |
| ●350<br>●450      | -•078<br>-•183   | -•290<br>-•388 | -•295<br>-•341            | ~•335<br>~•338        |         |                |                                 |                |                | ŀ      |
| •550              | 293              | 437            | 317                       | 363                   |         |                |                                 |                |                |        |
| •650              | 345              | ~•435          | ~.250                     | 382                   | 1       | 619            | 223                             | 299            | 387            | - 1    |
| •750              | 307              | 116            | 194                       | 396                   | ł       |                | 138                             | 300            | 390            | ł      |
| ●850<br>●900      | 129<br>067       | •012<br>•052   | 147<br>116                | -•392<br>-•380        | ļ       | 117<br>100     | ~•042<br>•001                   | 287<br>266     | 375            | l l    |
|                   |                  |                |                           |                       | Pinh    |                | •001                            |                | 367            |        |
| •025              | -1.049           | •042           | •460                      | •641                  | Right   |                | -•270                           | •488           | 745            |        |
| ●075              | 559              | 038            | 267                       | •448                  |         |                | -•435                           | •112           | •765<br>•373   | l      |
| •150              | ~• 265<br>~• 210 | 066            | .167                      | •333                  |         | <b>-</b> •395  | 355                             | 017            | •190           | 1      |
| ●250<br>●350      | -•310<br>-•319   | -•152<br>-•260 | •065<br>-•048             | •223<br>•080          | 1       |                |                                 |                |                | ł      |
| 450               | 381              | 332            | 158                       | <b>-</b> .025         |         |                |                                 |                |                | 1      |
| •550              | 348              | ~.405          | 236                       | 128                   | İ       |                |                                 |                |                |        |
| •650              | -•233<br>-•231   | 412            | 300                       | 190                   |         |                | 268                             | 555            | 456            | 1      |
| •750<br>•850      | -•181<br>-•099   | -•203<br>•033  | 290<br>118                | -•263<br>-•233        | }       |                | 155                             | 323            | 478            | - 1    |
| 900               | 063              | •072           | 051                       | -•217                 | 1       | 242            | -•022<br>•035                   | 106<br>091     | -•267<br>-•222 | Ĭ      |
|                   |                  |                |                           |                       |         |                |                                 |                | 7              |        |

TABLE IV.- PRESSURE GOEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_{t}=-6^{\circ}$  - Continued (p)  $\alpha=15.6^{\circ}$ ; M=0.60

|                   |                |                | Cp            | for-                  |                |                  |                | Cp for         | <del>-</del>   |              |
|-------------------|----------------|----------------|---------------|-----------------------|----------------|------------------|----------------|----------------|----------------|--------------|
| x                 | B=-3.9         | B=0°           | B= 3.9°       | B=7.9°                | B=12.7°        | B=-3.9°          | B=0°           | B=3.9°         |                | B=127°       |
| $\frac{x}{C_{v}}$ |                | Z              | by = 0.1      | 7                     |                |                  | Z              | by = 0.3       | 38             |              |
|                   |                |                |               | - <del>-</del>        | Left s         | ide              |                | - V - O.O      |                |              |
| •000              | 351            | •825           | •182          | •091                  | 489            | 262              | •740           | •364           | 443            | 879          |
| •025<br>•075      | -•619<br>-•171 | 139<br>143     | •278<br>•014  | •098<br><b>-</b> •091 | -•491<br>-•417 | •157<br>•075     | 102<br>143     | -•347<br>-•309 | -•694<br>-•507 | 931<br>798   |
| •150              | 045            | 171            | 143           | 199                   | 394            | •055             | 139            | -•282          | 391            | - 647        |
| •250              | 007            | 127            | 152           | 180                   | 331            | •034             | 153            | 270            | 340            | - 532        |
| 350               | 027            | 112            | 179           | 199                   | 293            | •011             | 182            | 275            | 315            | 451          |
| 450               | •027           | 127            | 197           | 203                   | 261            | 009              | 203            | 270            | 288            | 383          |
| ●550              | ●025           | <b></b> 121    | 170           | 176                   | 213            | •000             | -•171          | 225            | 244            | 326          |
| •650              | .034           | 086            | 132           | 135                   | 168            | •000             | 139            | 177            | 206            | 279          |
| •750              | •034           | 057            | 093           | 096                   | 123            | •009             | 089            | 116            | 149            | 218          |
| ●850              | •034           | -•009          | 036           | 041                   | 067<br>035     | •034             | 018<br>.023    | -•043<br>-•002 | 087<br>046     | 150<br>107   |
| •900              | •052           | •027           | 004           | 009                   |                | side             |                |                |                |              |
| •025              | •344           | 098            | 732           | 260                   | 089            | 460              | 096            | •123           | •196           | •211         |
| 075               | - 023          | 175            | 207           | 075                   | .030           | 364              | 139            | 050            | 123            | .245         |
| 150               | 162            | 164            | 059           | .004                  | •112           | 317              | 148            | •034           | •107           | •256         |
| •250              | 175            | <b></b> 125    | •005          | •055                  | •161           | -•285            | 150            | •032           | •109           | •270         |
| • 350∙            | 200            | 121            | .025          | •075                  | •182           | 278              | 166            | •021           | •100           | •261         |
| • 450             | - • 205        | 137            | •023          | •080                  | •179           | 266              | 182            | •003           | •087           | •233         |
| •550              | 171            | 118            | •028          | •080                  | •159           | -•230<br>-•173   | 168<br>130     | 004<br>.009    | •078<br>•073   | •204<br>•170 |
| •650              | 130<br>086     | -•082<br>-•052 | •032<br>•037  | ●075<br>●068          | •132<br>•109   | 107              | 073            | •028           | •071           | 143          |
| ●750<br>●850      | 018            | •011           | •057          | •073                  | •093           | 034              | •002           | •053           | •075           | 116          |
| 900               | •009           | •032           | 053           | •066                  | •075           | 004              | •018           | .046           | •059           | •084         |
|                   |                |                | $b_{\nu} = 0$ | 66                    |                |                  | Z/b            | v =0.93        |                |              |
|                   |                |                |               |                       | Left           | s ide            |                | , 0.00         |                |              |
| •000              | 043            | •665           | •062          | 530                   | 760            | •248             | •731           | 347            | 496            | 708          |
| •025              | •453           |                | -1.027        | -1.103                | 744            | •627             | 399            | -1.109         | 612            | -•491        |
| •075              | •276           | 121            | 577           | 998                   | <b>-</b> .724  | .285             | 305            | -1.100         | 601            | 462          |
| •150              | •171           | 148            | 438           | 806                   | 681            | •100             | -•287          | -•968          | 619            | - • 475      |
| •250              | •103           | 166            | 384           | 569                   | 631            | •059             | -•2 <b>2</b> 8 | 707            | 598            | 466          |
| •350              | ●043           | -•203<br>201   | 372           | -•452<br>-•395        | 579<br>520     |                  |                |                |                |              |
| ●450<br>●550      | 002<br>036     | -•221<br>-•212 | 354<br>297    | -•352                 | 460            | ŀ                |                |                |                |              |
| 650               | 023            | 162            | 218           | 288                   | 387            | 082              | 178            | 188            | -+386          | 329          |
| •750              | •000           | 091            | 132           | 212                   | 331            | 027              | 082            | 107            | 322            | 295          |
| 850               | •021           | 032            | 054           | 137                   | 272            | •007             | 002            | 027            | 256            | 272          |
| •900              | •027           | •000           | 009           | 112                   | 243            | •021             | •032           | •016           | 231            | 250          |
|                   |                |                |               |                       | Right          |                  |                |                |                |              |
| 025               | -1.105         | 064            | •455<br>•255  | •621                  | •610           | -1.086<br>-1.052 | 287<br>278     | •628<br>•264   | ●822<br>●470   | •960<br>•656 |
| •075<br>•150      | 642            | →•121<br>-•123 | •255<br>•164  | •42 <b>2</b><br>•310  | •502<br>•428   | 900              | 262            | •103           | •278           | 457          |
| 250               | 392            | 164            | •100          | •228                  | 362            |                  |                |                |                | • • • •      |
| 350               | 387            | 196            | .037          | .148                  | •297           |                  |                |                |                | Ī            |
| •450              | 351            | 209            | .000          | .105                  | •240           | •                |                |                |                |              |
| •550              | -•296          | 203            | 022           | •068                  | •184           | _                |                |                |                |              |
| •650              | 219            | 162            | 013           | •052                  | •148           | 168              | -•091          | 002            | •050           | 098          |
| •750              | 134            | 089            | •009          | <b>.048</b>           | •103           | 116              | 073            | -•009          | 009            | •001         |
| •850<br>•900      | -+032<br>+009  | •000<br>•030   | •053<br>•068  | •062<br>•055          | ∙078<br>•035   | -•032<br>•005    | •018<br>•052   | •048<br>•062   | •000<br>-•016  | 024<br>053   |
| • 700             | •009           | •030           | •000          | <b>■</b> ♥99          | •035           | •005             | •032           | • 002          | +010           |              |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Continued (q)  $\alpha=15.8^\circ$ ; M=0.80

|              |                |                | Cp 1         | for-                  |                | Cp for-        |               |                |               |                |  |  |
|--------------|----------------|----------------|--------------|-----------------------|----------------|----------------|---------------|----------------|---------------|----------------|--|--|
| х            | B=-3.9°        | B=0°           | B=39°        | B=7.9°                | B=12.70        | B=-3.9°        | B=0°          | B=3.9°         | B=7.9°        | B=12.7°        |  |  |
| x Cv         |                | Z/             | by = 0.1     | 7                     |                |                | Z/            | $b_{V} = 0.3$  | <i>8</i>      |                |  |  |
| *            |                |                |              |                       | Left s         | ide            |               |                |               |                |  |  |
| •000         | •032           | •859           | • 40 4       | •126                  | 499            | •332           | •778          | •299           | 229           | 555            |  |  |
| •025         | 955            | •095           | •327<br>•007 | •051<br><b>-</b> •121 | -•452<br>-•410 | -•002<br>-•067 | 049<br>139    | -•314<br>-•323 | 534<br>438    | 645<br>584     |  |  |
| •075<br>•150 | -+574<br>-+260 | -•097<br>-•197 | 192          | 121<br>236            | 386            | 059            | 156           | 300            | 380           | 517            |  |  |
| 250          | 124            | 142            | 179          | 197                   | 325            | 041            | 162           | 286            | 339           | 463            |  |  |
| 350          | 061            | 123            | 197          | 204                   | 278            | 041            | 197           | 289            | 318           | 413            |  |  |
| 450          | 017            | 139            | 215          | 207                   | 234            | 041            | 227           | <b>-</b> •279  | 294           | 360            |  |  |
| ▶550         | •001           | 132            | 188          | 171                   | 189            | 018            | 201           | -•242          | 254           | 311            |  |  |
| •650         | ♦024           | 091            | 144          | 138                   | 152            | 008            | 157           | 197            | 223           | 269            |  |  |
| •750         | •035           | 055            | 094          | 103                   | 116            | •009           | <b>-</b> ∙095 | 127            | 168           | 214            |  |  |
| .850         | •047           | 003            | 040          | 046                   | 066            | •041           | 009           | 051<br>009     | 106           | 157<br>122     |  |  |
| •900         | •05.7          | •033           | 007          | 016                   | 033            | •054           | •036          | -1009          | 066           | -0122          |  |  |
|              |                |                |              |                       | Right          |                |               |                |               |                |  |  |
| •025         | •394           | 768            | 948          | 452                   | 302            | 420            | 269           | -•050<br>-•092 | •005<br>-•028 | •055<br>•102   |  |  |
| •075         | 014<br>210     | 413<br>251     | 585<br>279   | 250<br>166            | 172<br>048     | 360<br>320     | 260<br>201    | 092<br>072     | 028           | •164           |  |  |
| •150<br>•250 | 204            | -•139          | 136          | 081                   | •058           | 292            | 154           | 040            | •017          | 220            |  |  |
| 350          | 221            | 088            | 065          | 019                   | •130           | - 283          | 142           | 030            | 034           | .242           |  |  |
| 450          | 222            | 077            | 022          | •019                  | .163           | 283            | 151           | 027            | .045          | .236           |  |  |
| •550         | 191            | 053            | •008         | •043                  | •157           | 249            | 138           | 013            | •054          | •217           |  |  |
| .650         | 141            | 021            | .026         | .055                  | •139           | 189            | 094           | •007           | •064          | •193           |  |  |
| •750         | -•095          | 002            | •037         | •061                  | 117            | 115            | 036           | •031           | ●067          | •157           |  |  |
| •850         | 021            | •042           | •057         | •073                  | • 093          | 035            | •030          | •061           | •076          | •127           |  |  |
| •900         | •000           | • 053          | •060         | .064                  | •078           | 003            | •047          | •052           | •061          | •090           |  |  |
| Ì            |                | Z              | $b_v = 0$    | .66                   |                |                | 2/6           | v =0.93        |               |                |  |  |
|              |                |                |              |                       | Left           | s ide          |               |                |               |                |  |  |
| •000         | •364           | •708           | .454         | .070                  | <b>~•</b> 390  | <b>∙6</b> 25   | •790          | • 356          | 075           | 523            |  |  |
| •025         | ●380           | 061            | -1.059       | 918                   | 631            | •529           | 497           | 934            | 508           | - 499          |  |  |
| •075         | •220           | 110            | 532          | 810                   | ~•611          | •202           | 363           | 582            | 406           | -•401<br>-•411 |  |  |
| •150         | •128           | 147            | 402          | 649                   | -•584<br>-•542 | •038<br>•024   | 345<br>248    | 603<br>573     | 408<br>408    | 408            |  |  |
| • 250        | •066<br>•009   | -•186<br>-•237 | 347<br>356   | -•468<br>-•373        | -•542<br>-•505 | •024           | 2-0           | 513            | 08            |                |  |  |
| •350<br>•450 | 046            | -•277          | 361          | 330                   | <b>463</b>     |                |               |                |               |                |  |  |
| •550         | 071            | 266            | 315          | <b>~•</b> 309         | 414            | 1              |               |                |               |                |  |  |
| •650         | 053            | 198            | 232          | 283                   | 363            | 129            | 169           | 277            | 374           | 284            |  |  |
| •750         | 018            | 097            | 151          | 251                   | 314            | 059            | 047           | 239            | 348           | 257            |  |  |
| ●850         | •016           | 014            | 068          | 201                   | -•270          | 021            | •042          | 186            | 311           | 230            |  |  |
| •900         | •030           | •029           | 031          | 171                   | 248            | 015            | •075          | 153            | -•292         | 220            |  |  |
|              |                |                |              |                       |                | t side         |               |                |               |                |  |  |
| •025         | -1.112         | ~•085          | •400         | •597                  | •687<br>•557   | 624<br>610     | 289<br>302    | •542<br>•193   | •799<br>•435  | 1.013<br>.687  |  |  |
| •075<br>•150 | 536<br>373     | -•126<br>-•109 | •196<br>•137 | •381<br>•286          | ∙557<br>•480   | -632           | 260           | •051           | • 246         | • 486          |  |  |
| 250          | 357            | 144            | •072         | •205                  | •413           |                |               | ••••           |               | •              |  |  |
| 4350         | 378            | 186            | •005         | •125                  | • 342          |                |               |                |               |                |  |  |
| 450          | 369            | 204            | 037          | •076                  | •278           |                |               |                |               |                |  |  |
| •550         | 310            | 197            | 056          | •049                  | •217           |                |               |                |               |                |  |  |
| .650         | 230            | 136            | 040          | •040                  | •174           | -•246          | 077           | 021            | •028          | •105           |  |  |
| 750          | 147            | 059            | 009          | •037                  | •128           | 225            | 024           | 039            | 034           | •004           |  |  |
| 850          | 042            | •039           | •048         | •051                  | •084           | 159            | •071<br>•107  | •010<br>•010   | 025<br>050    | 022<br>054     |  |  |
| •900         | •004           | •074           | •061         | •037                  | •048           | 126            | 10/           | 9010           | ~ 1050        | - 1004         |  |  |

TABLE IV.- PRESSURE.COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIMONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = -6^\circ$  - Continued (r)  $\alpha = 15.9^\circ$ ; M = 0.85

|              |         |           | Cp.           | for-           |                |               | (             | Cp for -       | -          |                       |
|--------------|---------|-----------|---------------|----------------|----------------|---------------|---------------|----------------|------------|-----------------------|
| х            | B=-3.   | 94 B = 0° | B=3.9°        | B=7.9°         | B=12.7°        | B=-3.9°       | B=0°          | B=3.9°         | B=7.9°     | B=12.7°               |
| x - C - X    |         | Z         | by = 0.1      | 7              | <u> </u>       |               | 2/            | $b_V = 0.3$    | 8          |                       |
| *            |         |           |               |                | Left s         | ide           |               |                |            |                       |
| • 000        |         |           | •574          | •140           | 587            | •420<br>•097  | •775<br>-•153 | .349<br>~.435  | 237<br>595 | 522<br>646            |
| •02          |         |           | •247<br>-•046 | 063<br>211     | 552<br>498     | 041           | 230           | 418            | 504        | 594                   |
| •150         |         |           | 278           | 320            | 457            | 072           | 216           | 368            | 438        | 533                   |
| 250          |         |           | 233           | -,254          | 387            | 079           | 204           | 326            | 382        | 475                   |
| 350          |         |           | 235           | 240            | 322            | 098           | 235           | 318            | 348        | 432                   |
| . 45         |         |           | 241           | 233            | 265            | 113           | 273           | 309            | 321        | 384                   |
| • 550        |         |           | 219           | 197            | -•209          | 085           | 242           | 274<br>220     | 277<br>241 | 336<br>299            |
| •65          |         |           | 159           | -•149<br>-•117 | 168<br>130     | 062           | 192<br>109    | 220<br>151     | 187        | 230                   |
| • 75         | 4       |           | 111<br>052    | 063            | -•130<br>-•076 | •006          | 018           | 069            | 126        | 188                   |
| • 850        |         |           | 013           | -•035          | 044            | •030          | •033          | 023            | 083        | 148                   |
| 1 900        |         |           |               | •••            | Right          | side          |               |                |            |                       |
| .02          | 5 .318  | 685       | -1.070        | 511            | 418            | 791           | 279           | 069            | 052        | 016                   |
| •07          | 5096    | 845       | 664           | 324            | 285            | 573           | 315           | 146            | 096        | •014                  |
| • 15         |         |           | 337           | 241            | 152            | -•427         | <b>26</b> 2   | 145            | 086<br>052 | •079<br>•142          |
| • 25         |         |           | 220<br>153    | 166<br>092     | -•034<br>•058  | 312<br>298    | 211<br>194    | 108<br>094     | 032        | 169                   |
| • 35         | i i     |           | 094           | 038            | •111           | 295           | 201           | 084            | 013        | .183                  |
| a 45         |         |           | 047           | <b>~.</b> 004  | •124           | 266           | 178           | 066            | •002       | •178                  |
| 65           | -       |           | 012           | .021           | .114           | 207           | 124           | 036            | .026       | ·163                  |
| .75          |         |           | .013          | .036           | .104           | 127           | 058           | 004            | •039       | .134                  |
| .85          |         | •030      | .043          | •052           | •086           | 047           | •023          | •036           | •052       | •110                  |
| •90          | 0 002   |           | •045          | •051           | •066           | 011           | +040          | •033           | •038       | •068                  |
|              |         | Z,        | 1bv = 0       | .66            |                |               | Z/b           | v =0.93        |            |                       |
|              |         |           |               |                | Left           | s ide         |               |                |            |                       |
| •00          |         |           | •496          | ·166           | 234            | •680          | •809          | •497           | .061       | 420                   |
| •02          | l l     |           | -1.170        | 941            | 621            | 498           | 555           | 886            | 448        | 512<br>402            |
| • 07         |         |           | 544           | 834            | -∙605<br>-•578 | •172<br>••011 | 422<br>386    | 469<br>484     | 374<br>375 | 411                   |
| •15          |         |           | 400<br>336    | 662<br>489     | 540            | 017           | ~.239         | 479            | 380        | 415                   |
| • 25<br>• 35 |         |           | 346           | 375            | 501            | •01,          | • 237         | •              |            | •                     |
| 45           |         |           | 359           | 324            | 468            | ŀ             |               |                |            |                       |
| 55           |         |           | 318           | 303            | 428            |               |               |                |            |                       |
| .65          | 0120    |           | 247           | 287            | 384            | 201           | 165           | 313            | 377        | 320                   |
| • 75         |         |           | 175           | 271            | 343            | 116           | 049           | -•295          | 360        | 291                   |
| ♦85          |         |           | 104           | 236            | 299            | 072<br>069    | •040<br>•074  | 257<br>233     | 337<br>327 | 257<br>248            |
| •90          | 01      | •025      | 064           | 216            | 282<br>Bigh    | t side        | •014          | -1233          | - 6 32 1   | - \$240               |
| .02          | 5 -1.30 | -•099     | •359          | •576           | 708            | -•498         | <b></b> 290   | •487           | •780       | 1.006                 |
| 07           |         |           | 162           | 357            | 551            | - 486         | 381           | .134           | .398       | •673                  |
| •15          | - 1     | 143       | .095          | • 254          | .464           | 496           | <b>~</b> •320 | 015            | .204       | <ul><li>455</li></ul> |
| • 25         |         |           | .028          | •170           | .389           | 1             |               |                |            |                       |
| • 35         |         |           | 049           | •086           | •310           | 1             |               |                |            |                       |
| • 45         |         |           | 094           | •039           | •247<br>•103   |               |               |                |            |                       |
| • 55         |         |           | 114<br>098    | 001<br>005     | •193<br>•145   | 301           | 077           | 059            | 018        | •094                  |
| • 65         |         |           | 098           | 002            | •145           | 289           | 029           | -∎099<br>-∎083 | 073        | 028                   |
| •75<br>•85   |         |           | •016          | •021           | •068           | 245           | •074          | 030            | 056        | 051                   |
| 90           |         |           | .029          | •001           | •024           | 208           | 105           | 037            | 083        | 095                   |

TABLE IV.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=-6^\circ$  - Concluded (s)  $\alpha=15.9^\circ;~M=0.90$ 

|                   |                |                                       | Cp             | for-           |         |             |               | Cp for        | _         |        |
|-------------------|----------------|---------------------------------------|----------------|----------------|---------|-------------|---------------|---------------|-----------|--------|
| X                 | B = -3.99      | B=0°                                  | B=3.9°         | B=7.9°         | B=12.70 | B=-3.9°     | B=0°          | B=3.9°        | B=7.9°    | B=12.7 |
| $\frac{x}{C_{v}}$ |                | 2/                                    | by = 0.1       | /              |         |             | Z/            | $b_V = 0.3$   | <i>38</i> |        |
|                   |                |                                       |                |                | Left s  | ide         |               |               |           |        |
| •000              | •560           | •906                                  | •777           | •280           |         | •462        | •756          | •517          | .166      |        |
| •025              | -1.029         | 264                                   | •238           | 202            |         | ●349        | 138           | -1.117        | -1.363    |        |
| • 075             | 512            | 365                                   | 063            | - 295          |         | •150        | <b>-</b> •220 | <b>-</b> •593 | 926       |        |
| •150              | 178            | 368                                   | 354            | 480            |         | 049         | 240           | 567           | 754       |        |
| • 250             | 138            | 339                                   | 605            | 658            |         | 027         | <b>~</b> •226 | 607           | -•698     |        |
| • 350             | 145            | 246                                   | 497            | 584            |         | 110         | 269           | - 295         | 420       |        |
| •450<br>•550      | 161            | 234                                   | 229            | 280            |         | 186         | 344           | 293           | 404       |        |
| •650              | -•209<br>-•197 | <b></b> 324<br>229                    | <b>3</b> 19    | 324            |         | 212         | <b>~•</b> 388 | 346           | 353       |        |
| • 750             | 164            | 144                                   | -•231<br>- 1/3 | <b>-</b> .268  |         | 230         | 340           | 286           | 297       |        |
| •850              | 105            | 054                                   | 163<br>083     | <b>-</b> •214  |         | 198         | 198           | 191           | 244       |        |
| •900              | 060            | 003                                   | 030            | 146            |         | 120<br>176  | 050           | 101           | 188       |        |
| . 900             | -•060          | -•003                                 | - 10 30        | 092            | Right   | side        | 194           | -•175         | 154       |        |
| •025              | •330           | 226                                   | <b></b> 951    | 105            |         | -1.101      | 130           | •371          | .461      |        |
| 075               | 073            | 487                                   | 489            | 154            |         | 618         | 214           | •145          | •236      |        |
| .150              | 377            | 360                                   | 182            | 140            |         | 598         | 230           | 039           | •111      |        |
| .250              | 619            | 320                                   | 150            | 137            |         | 596         | 218           | 029           | .035      |        |
| .350              | 491            | 261                                   | 165            | 136            |         | 319         | 265           | 091           | 032       |        |
| 450               | 273            | 289                                   | 189            | 149            |         | 284         | 319           | 166           | 101       |        |
| • 550             | 241            | 241                                   | 189            | 118            |         | 332         | 333           | 203           | 130       |        |
| .650              | 218            | 205                                   | 186            | 112            |         | 284         | 320           | 213           | 140       |        |
| <b>♦750</b>       | 172            | 150                                   | 158            | 088            |         | 188         | 198           | 183           | 124       |        |
| •850              | 072            | 040                                   | 073            | 044            |         | 090         | 042           | 093           | 081       |        |
| • 900             | 038            | 006                                   | 047            | 038            |         | 052         | 006           | 065           | 096       |        |
|                   |                | Z/                                    | by = 0.        | 66             |         |             | Z/b           | v =0.93       |           |        |
|                   |                | · · · · · · · · · · · · · · · · · · · |                |                | Left    | side        |               |               |           |        |
| •000              | •321           | •695                                  | •366           | 015            |         | •699        | •823          | •499          | •079      |        |
| •025              | •409           | 088                                   | -1.231         | 746            |         | ●535        | <b>-</b> •505 | 821           | 380       |        |
| • 075             | • 244          | 124                                   | -1.047         | 747            |         | •201        | 463           | <b>-</b> •391 | 373       |        |
| •150              | •131           | 160                                   | 622            | <b>-</b> •748  |         | 006         | <b>-</b> •391 | 393           | 375       |        |
| • 250             | •039           | <b>-</b> •214                         | 207            | 663            |         | 015         | <b>-</b> •258 | 405           | 394       |        |
| • 350             | 070            | <b>-</b> •323                         | 270            | 547            |         |             |               |               |           |        |
| • 450             | 190            | -•415                                 | <b>-</b> •375  | - 465          |         |             |               |               |           |        |
| •550              | 300            | 467                                   | 401            | 369            |         |             | 010           |               |           |        |
| .650<br>.750      | 312            | 504                                   | 318            | -•351<br>- 345 |         | 546         | 212           | 367           | 423       |        |
| • 750<br>• 850    | -•324<br>-•230 | 144                                   | -•267<br>214   | 365            |         | - 469       | 165           | 365           | 427       |        |
| •900              | ~.168          | 034<br>.003                           | 214<br>179     | 369            |         | 196         | -•096         | 342           | 420       |        |
| <b>₽</b> 900      | 108            | •003                                  | -•119          | 360            | Right   | 174         | 050           | 321           | 415       |        |
| •025              | -1.258         | 049                                   | •431           | <b>∌</b> 600   | 11/9/// | <b>4</b> 21 | 216           | •547          | •823      |        |
| •075              | -1.046         | 116                                   | 233            | •412           |         | - 401       | - 459         | 179           | •437      |        |
| •150              | 574            | 125                                   | •143           | 298            |         | 403         | -•345         | •009          | .217      |        |
| • 250             | 198            | 206                                   | 042            | 194            |         | 1           | •             | •007          | 7         |        |
| • 350             | 289            | 311                                   | 069            | •062           |         | 1           |               |               |           |        |
| 450               | 373            | 377                                   | 174            | 050            |         |             |               |               |           |        |
| •550              | 387            | 440                                   | 262            | 145            |         |             |               |               |           |        |
| .650              | 319            | 439                                   | 323            | 200            |         | 363         | 309           | 491           | 293       |        |
| .750              | 276            | 288                                   | 338            | - 222          |         | 369         | 218           | 334           | 269       |        |
| 850               | 205            | 015                                   | 153            | 152            |         | 349         | 081           | 138           | 202       |        |
|                   |                |                                       |                |                |         |             |               |               |           |        |

Table v.- pressure coefficients for the combination of the wing, fuselage, vertical tail, and horizontal tail. Horizontal tail in the rearward position;  $i_t$  =  $0^\circ$  (a)  $\alpha$  =  $0^\circ$ ; M = 0.60

|                      |              |              | Cp           | for-         |                  |              |                | op for        |   |                  |
|----------------------|--------------|--------------|--------------|--------------|------------------|--------------|----------------|---------------|---|------------------|
| x                    | B = -3.9°    | B=0°         | B=3.9°       | B=7.9°       | B=12.70          | B=-3.9°      | B=0°           |               | B=7.9°                                  | B=12.79          |
| $\frac{x}{c_{\vee}}$ | <i>'</i>     |              | by = 0.1     | 1            |                  |              | Z/             | $b_V = 0.3$   | 38                                      |                  |
| V                    |              |              |              |              | Left s           | ide          |                |               |   | <del> </del>     |
| •000                 | •642         | •647         | •334         | 438          | -1.286           | •262         | •741<br>-•098  | •289<br>-•647 | 688<br>-1.405                           | -1.166<br>-1.064 |
| •025                 | •276         | 096          | 561          | -1.134       | -2.145<br>-1.504 | •346<br>•160 | 131            | 443           | -1.063                                  | -1.038           |
| •075                 | •141         | 105          | 372<br>307   | 672<br>500   | -14504<br>-4677  | •066         | 141            | 329           | 573                                     | 967              |
| • 150<br>250         | •048<br>•023 | 133<br>100   | 213          | 307          | 404              | 002          | 138            | 279           | 403                                     | 907              |
| • 250<br>• 350       | -011         | 112          | 182          | 240          | 325              | 055          | 176            | 272           | 348                                     | 772              |
| 450                  | 052          | 124          | 168          | 201          | 284              | 089          | 190            | 252           | 297                                     | - + 513          |
| •550                 | 057          | 105          | 127          | 157          | 284              | 082          | 150            | 200           | 231<br>171                              | -•478<br>-•383   |
| .650                 | 039          | 074          | 088          | 113          | 219              | 066          | 115<br>065     | 145<br>079    | 100                                     | <b>-</b> •363    |
| • 750                | 014          | 029          | 034          | 072          | 140<br>069       | 030          | •006           | 002           | 021                                     | - 200            |
| 850                  | •030         | •025         | •023<br>•055 | 015<br>.020  | 022              | •052         | •041           | •041          | •025                                    | 150              |
| • 900                | •05.5        | •051         | •055         | .020         | Right            | side         |                |               |   |                  |
| 0.75                 | 449          | 034          | •309         | •576         | •797             | 645          | 065            | •382<br>•171  | •608<br>•379                            | •749             |
| •025<br>•075         | 389          | 115          | 141          | •576<br>•349 | 3550             | 435          | 126            |               |   | 533              |
| •150                 | 305          | 122          | •062         | •220         | •383             | 337          | 133            | •078          | .238<br>.142                            | •378<br>•246     |
| • 250                | 219          | 105          | •030         | •149         | • 269            | - 273        | 143<br>157     | •016<br>-•032 | •071                                    | •168             |
| • 350                | 194          | 115          | 018          | •077         | •175<br>•100     | 253<br>241   | 162            | 070           | •022                                    | •098             |
| 450                  | 173          | 129          | 057<br>054   | •022<br>•006 | •068             | 203          | 145            | 072           | 003                                     | .054             |
| • 550                | 132<br>080   | 105<br>065   | 025          | •015         | •059             | 143          | 107            | 047           | .008                                    | •043             |
| .650<br>.750         | 030          | 027          | 002          | 031          | •056             | 071          | 046            | 011           | •029                                    | •038             |
| •850                 | •034         | •034         | .050         | .061         | •073             | •007         | •030           | •055          | •064                                    | •047             |
| •900                 | €057         | .053         | .064         | •071         | •073             | •039         | •041           | .062          | •064                                    | •022             |
|                      |              | Z,           | $b_v = 0$    | .66          |                  | 1            | 2/0            | v =0.93       | <u> </u>                                |                  |
|                      |              |              |              |              | Left             | s ide        |                |               |   |                  |
| •000                 | •212         | •732         | •239         | 451          | 640              | ●358         | •772           | •114          | -+490                                   | 610              |
| 025                  | .374         | 115          | 875          | -1.146       | 691              | •483         | 058            | -1.002        | -1.015                                  | 545<br>494       |
| .075                 | •185         | ~•138        | 513          | -1.086       | 668              | •330         | -•070<br>-•129 | 572<br>475    | 842<br>787                              | - 497            |
| ·150                 | •082         | 155          | 400          | -4975        | 670              | 180          | 129            | 422           | 677                                     | - 497            |
| • 250                | •016         | 157          | 332<br>311   | 709<br>467   | 629<br>580       | 1032         |                | • 42 2        | • | • 7 . 1          |
| • 350                | 036          | 181<br>200   | 297          | 359          | 545              |              |                |               |   |                  |
| .450<br>.550         | 102          | 200          | 268          | 302          | 506              | 1            |                |               |   |                  |
| •650                 | 080          | 157          | 209          | 238          | 464              | 143          | 235            | 293           | 346                                     | 381              |
| .750                 | 041          | 105          | 134          | 164          | 423              | 118          | 181            | 216           | 288                                     | 353              |
| .850                 | 007          | 037          | 057          | 097          | 381              | 080          | 112            | 129           | 226<br>189                              | 316<br>300       |
| •900                 | •009         | 006          | 016          | 061          | <b></b> 363      | 050          | •074           | 086           | -1189                                   |                  |
|                      |              |              |              |              |                  | † side       | •013           | •514          | •675                                    | •735             |
| •025                 | 802          | 070<br>129   | •414<br>•191 | •615<br>•395 | •702<br>•519     | 526          | 051            | 323           | 528                                     | 658              |
| •075<br>•150         | 506<br>362   | 138          | •100         | 259          | •385             | 433          | 110            | .203          | .404                                    | •561             |
| 250                  | 326          | 155          | .028         | 165          | .274             |              |                |               |   |                  |
| •350                 | 314          | 176          | 029          | •091         | .188             | 1            |                |               |   |                  |
| 450                  | 296          | 190          | 061          | •038         | •124             | 1            |                |               |   |                  |
| •550                 | 262          | 183          | 077          | •011         | •070             | 232          | 195            | 102           | 033                                     | 011              |
| •650                 | 205          | 152          | 066          | •002         | •033<br>•001     | 273<br>207   | 171            | 102           | 072                                     | 092              |
| •750                 | 134          | 110          | 032          | •008<br>•043 | 022              | 100          | 065            | 032           | 042                                     | 108              |
| 850                  | 032          | •011<br>•027 | •025<br>•050 | •043         | -•022<br>-•069   | 055          | 037            | 009           | 051                                     | 140              |
| •900                 | 1 .011       | •021         | •050         | 1040         | •••              |              |                |               |   |                  |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t$  =  $0^{\circ}$  - Continued (b)  $\alpha$  =  $0^{\circ}$ : M = 0.80

|                   |                |                | Cp                    | for-          |                |            |  | Cp for         | · _        |   |
|-------------------|----------------|----------------|-----------------------|---------------|----------------|------------|--|----------------|------------|---|
| X                 | B=-3.9         | B=0°           | B=3.9                 | B=7.90        | B=12.7°        | B=-3.9°    | <u>r                                    </u> | B=39           | 1/-        | B=12.7                                  |
| $\frac{x}{C_{v}}$ |                | Z,             | 1by = 0               | .//           |                |            | Z  | 1bv = 0        | .38        |   |
| ·                 |                | .,             |                       |               | Left s         | ide        |  |                |            |   |
| •000              | •725           | •677           | •523                  | •201          | 240            | •475       | •775   | •520           | •010       | 428                                     |
| .025              | •286           | 069            | <b>54</b> 8           | -1.042        | -1.000         | •347       | 069  | <b>9</b> 83    | -1.715     | - +683                                  |
| • 075             | •155           | 090            | 374                   | <b>-</b> •872 | ~.884          | •163       | 122  | 462            | -1.506     | - •688                                  |
| • 150             | •055           | 133            | 330                   | 549           | <b>~•798</b>   | •071       | 141  | ~.352          | 482        | 702                                     |
| • 250             | •029           | 097            | <b>2</b> 28           | 312           | 664            | •000       | 152  | 301            | 370        | 686                                     |
| 4350              | 015            | 111            | 196                   | 246           | 539            | 061        | 174  | 290            | 349        | 616                                     |
| ∙450<br>•550      | -•063<br>-•063 | 133            | 187<br>115            | 218<br>162    | 452            | 110<br>096 | 197  | 279<br>225     | 303<br>234 | 531                                     |
| •650              | 054            | -•111<br>-•082 | -•115<br>-•095        | <b>-</b> 124  | 341<br>266     | 078        | 169<br>127                                   | 164            | 174        | 438<br>359                              |
| •750              | 020            | 027            | 030                   | 071           | -•200<br>-•199 | 032        | -•127<br>-•060                               | -•164<br>-•085 | 096        | - 297                                   |
| 850               | •032           | •033           | 035                   | 009           | 116            | 030        | •019   | •008           | 009        | - 250                                   |
| 900               | 059            | •069           | .064                  | •031          | 064            | •065       | •061   | •055           | •037       | - 213                                   |
| • 700             |                | •007           |                       |               | Right          | side       | ••••   | •••            | •03.       | • |
| •025              | 400            | •004           | •324                  | •593          | •810           | 977        | 057  | •379           | •608       | •752                                    |
| ●025<br>●075      | 395            | 094            | 149                   | 360           | .560           | - 442      | -115   | 166            | .374       | •545                                    |
| •150              | 313            | 115            | .066                  | .230          | •394           | 343        | 127  | .076           | .239       | •394                                    |
| • 250             | 229            | 099            | .028                  | •159          | s294           | 287        | 139  | •006           | .144       | .276                                    |
| • 350             | 203            | 118            | 023                   | •079          | 190            | 272        | 161  | 042            | •074       | <ul><li>187</li></ul>                   |
| 4450              | 191            | 129            | 061                   | •016          | •104           | 265        | 175  | 083            | •010       | ·104                                    |
| •550              | 144            | 113            | 064                   | 003           | •064           | 223        | 158  | 091            | 016        | •055                                    |
| •650              | 084            | 066            | 036                   | •005          | •044           | 156        | 111  | -:061          | 009        | .038                                    |
| •750              | 029            | <b>-</b> •027  | 009                   | •019          | •037           | 069        | 041  | 012            | •013       | •023                                    |
| <b>850</b>        | •042           | •046           | <ul><li>047</li></ul> | •059          | •047           | •023       | •043   | •052           | ●057       | •017                                    |
| •900              | •074           | •065           | •060                  | •066          | +040           | •059       | •058   | •060           | •056       | 023                                     |
|                   |                |                | 1b <sub>v</sub> = C   | ).66          |                | l          | 2/1  | $p_{v} = 0.9$  | ,          |   |
|                   |                |                |                       |               | Left           | s ide      |  |                |            |   |
| • 000             | •440           | .764           | 488                   | 003           | 336            | ●533       | •811   | •397           | 139        | 349                                     |
| •025              | •370           | <b>-</b> •099  | -1.152                | -1.336        | <b>-•735</b>   | e483       | 012  | -1.167         | -1.093     | - • 402                                 |
| •075              | •192           | 129            | 565                   | -1.182        | <b></b> 761    | •350       | 044  | 691            | 577        | 390                                     |
| •150              | •081           | 150            | 422                   | 950           | 773            | •203       | 113  | 545            | 580        | 414                                     |
| . 250             | •018           | 157            | 345                   | -4692         | 689            | •065       | <b></b> 2 <b>0</b> 2                         | 425            | 589        | -•423                                   |
| • 350             | 037            | -•186          | 334                   | 480           | 484            |            |  |                |            |   |
| • 450<br>• 550    | 087<br>118     | <b>-</b> •220  | 340                   | 373<br>332    | 449            |            |  |                |            |   |
|                   | 096            | -•224<br>-•177 | 314<br>238            | 283           | 451<br>455     | 163        | 253  | 308            | 382        | 399                                     |
| •650<br>•750      | 054            | 107            | 143                   | -•215         | 447            | 137        | 182  | 208            | 318        | 384                                     |
| 850               | 005            | 027            | 047                   | 142           | 414            | 081        | 097  | 106            | 258        | 344                                     |
| 900               | •023           | 007            | 003                   | 102           | 400            | 043        | 049  | 059            | 235        | 317                                     |
|                   |                |                |                       |               | Right          | side       |  |                |            |   |
| • 025             | -1.220         | 054            | •408                  | •624          | 731            | -1.160     | •055   | ø525           | •705       | •782                                    |
| •075              | ~•517          | 125            | •187                  | • 396         | •545           | 601        | 024  | .354           | •559       | •706                                    |
| •150              | 371            | 122            | •099                  | •2 <b>72</b>  | •411           | 476        | 074  | •230           | • 435      | •607                                    |
| • 250             | ~•333          | 146            | •025                  | •172          | • 300          | 1          |  |                |            |   |
| • 350             | 331            | <b>171</b>     | 030                   | •097          | •212           |            |  |                |            |   |
| • 450             | 330            | 206            | 068                   | •040          | •145           | 1          |  |                |            |   |
| •550              | 299            | -•206          | 092                   | •001          | •078           | 1          |  |                | <u>-</u>   |   |
| •650              | -•226          | 171            | 079                   | 016           | •034           | 297        | 227  | 123            | 067        | 018                                     |
| ≥750              | 131            | 111            | 042                   | 016           | 012            | 197        | 171  | 115            | 117        | 119                                     |
| •850<br>000       | 017            | •023           | •032                  | •019          | 044            | 072        | 051  | 026            | 085        | - 125                                   |
| • 900             | ●035           | <b>♦0</b> 44   | •055                  | •022          | -•090          | 020        | 016  | 003            | 099        | 161                                     |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t = 0^\circ$  - Continued (c)  $\alpha = 0^\circ$ ; M = 0.85

|                   |                |                |                       | for-         |                |              |                | Cp for        |                  |              |
|-------------------|----------------|----------------|-----------------------|--------------|----------------|--------------|----------------|---------------|------------------|--------------|
| X                 | B=-3.9°        | 1'             | i'                    | 1"           | B=12.7°        | B=-3.9"      |                | B= 3.9°       |                  | B=12.7°      |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1              | 7            |                |              | Z/             | $b_V = O$ .   | 38               |              |
|                   |                |                |                       |              | Left s         | ide          |                |               |                  |              |
| •000              | •757           | •682           | .574                  | • 327        | 098            | •531         | •789           | •611          | .166             | 292          |
| •025<br>•075      | •283<br>•156   | -•061<br>-•091 | 522<br>369            | 946<br>828   | 975<br>849     | •342<br>•160 | -•072<br>-•131 | -1.052<br>424 | -1.453<br>-1.287 | 665<br>667   |
| •150              | •054           | -•138          | 343                   | 648          | -•751          | •070         | 145            | 355           | -1.113           | 678          |
| 250               | •029           | 111            | 232                   | 343          | 626            | 004          | 159            | 306           | 276              | 658          |
| •350              | 020            | 122            | 202                   | 241          | 535            | 066          | 189            | 302           | 287              | 607          |
| •450              | 070            | 148            | -•1 <b>9</b> 9        | 206          | 478            | 122          | 218            | 292           | 296              | 535          |
| ♦550              | -•073          | 128            | 152                   | 160          | 387            | 109          | 194            | 239           | 240              | 455          |
| •650              | 064            | 102            | 106                   | 131          | 311            | 087<br>040   | 152<br>078     | 177<br>087    | 181<br>110       | 381<br>306   |
| 4750              | -•027<br>•026  | 045<br>.029    | 034<br>.036           | 077<br>013   | 240<br>153     | •029         | •015           | •013          | 020              | 260          |
| •850<br>•900      | •057           | •068           | •067                  | •029         | <b>10</b> 8    | 070          | .065           | .061          | •033             | 224          |
| • 700             | •007           | 1000           |                       |              | Right          | side         |                |               |                  |              |
| •025              | 369            | •010           | •329                  | .596         | .814           | 967          | 045            | •373          | •599             | •744         |
| 075               | 388            | 092            | 147                   | 360          | • 555          | 441          | 118            | .166          | .369             | .536         |
| 150               | 322            | 116            | .066                  | .230         | •387           | 349          | 134            | •074          | .236             | •383         |
| 250               | 238            | 108            | •027                  | •159         | •281           | 295          | 152            | •004          | .137             | •261         |
| ●350              | -•216          | 129            | 027                   | •074         | •181           | 282          | 175            | 052           | •059             | •176         |
| 450               | 202            | 148            | 073                   | •003         | •087           | 275          | 194            | 097           | 007              | •087         |
| •550              | 156            | 132            | 077<br>046            | 018<br>010   | •047<br>•024   | 236<br>170   | 181<br>135     | 104<br>073    | 036<br>028       | •034<br>•014 |
| •650<br>•750      | -•090<br>-•032 | 079<br>038     | 022                   | 001<br>001   | •011           | 072          | -•059          | 022           | 006              | 002          |
| 850               | •043           | •038           | •046                  | •049         | •024           | 026          | 042            | 050           | •040             | 012          |
| •900              | •074           | •070           | .064                  | .059         | •008           | .063         | •062           | .061          | •040             | 057          |
|                   |                |                | by = 0.               |              |                |              | Z/b            | v = 0.93      |                  |              |
|                   |                |                |                       |              | Left           | side         |                |               |                  |              |
| .000              | •498           | •777           | •554                  | •147         | 237            | 569          | •819           | •458          | 021              | 290          |
| 025               | •363           | 102            | -1.167                | -1.411       | 743            | .488         | 048            | -1.153        | -1.153           | 463          |
| •075              | •183           | 141            | 575                   | -1.214       | 762            | •358         | 051            | 787           | 511              | 392          |
| •150              | •079           | 164            | 412                   | 901          | 772            | •205         | 114            | 579           | 508              | 415          |
| •250              | •011           | 168            | 333                   | 638          | 713            | •060         | 216            | 411           | ~.513            | 431          |
| •350              | 046            | 205            | 341                   | 450          | 477            | 1            |                |               |                  |              |
| •450<br>•550      | -•093<br>-•133 | 245<br>259     | 358<br>332            | 346<br>324   | -•439<br>-•442 |              |                |               |                  |              |
| 650               | 113            | 213            | 258                   | 298          | 451            | 187          | 289            | 311           | 413              | 408          |
| 750               | 067            | 128            | 142                   | 251          | ~.454          | 150          | 199            | 203           | 370              | - 399        |
| 850               | 009            | 028            | 034                   | 191          | 435            | 084          | -•098          | 094           | 313              | 367          |
| •900              | •020           | •013           | •010                  | 150          | 418            | 044          | 047            | 043           | 274              | 350          |
|                   |                |                |                       |              | Right          |              |                |               |                  |              |
| ●025              | -1+150         | 047            | •403                  | •610         | •727           | -1.206       | •069           | •524          | •703             | •792         |
| •075              | 435            | 124            | •190                  | •387         | •537           | 630          | 019            | •353          | •563             | •707         |
| •150              | 365            | 126            | •097                  | •263         | •399<br>•399   | -•482        | 077            | •230          | •432             | •603         |
| 250               | -•329<br>-•342 | 162<br>195     | •024<br><b>-</b> •039 | •163<br>•089 | •289<br>•200   | 1            |                |               |                  |              |
| • 350<br>• 450    | 353            | -•195<br>-•226 | 086                   | •029         | •122           | 1            |                |               |                  |              |
| •550              | 343            | 241            | 109                   | 023          | •057           | 1            |                |               |                  |              |
| .650              | -0253          | 202            | 097                   | 043          | •002           | 306          | 251            | 136           | 098              | 056          |
| .750              | 140            | 125            | 057                   | 047          | 047            | 196          | 182            | 132           | 156              | 156          |
| •850              | 013            | •012           | •024                  | 014          | 067            | 062          | 051            | 037           | 123              | 159          |
| • 900             | •040           | •045           | •053                  | 014          | 122            | 012          | 011            | 009           | 133              | 199          |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t$  = 0° - Continued (d)  $\alpha$  = 0°; M = 0.90

|               |               |                | Cp                    | for-           |                |               |                  | Cp for       |                  |                   |
|---------------|---------------|----------------|-----------------------|----------------|----------------|---------------|------------------|--------------|------------------|-------------------|
| <b>y</b>      | B=-39         | B=0°           |                       | B=7.9°         | B=12.7°        | B=-3.9°       |                  | B=3.9°       | B=79°            | B=127°            |
| x - C_V       | 1,2           | 1'             |                       | 11             | D-12.7         | p 5.9         | <u> </u>         | 7            | 1/               | J3=12.70          |
| \ \frac{1}{2} | <u> </u>      |                | bv = 0.               | 1              |                | L             |                  | by = 0.      | 38               |                   |
|               | <u> </u>      |                |                       |                | Left s         | ide           |                  |              |                  |                   |
| •000          | • 786         | •693           | •619                  | 436            | •052           | ●585          | •798             | •670         | •300             | 158               |
| •025<br>•075  | •297          | 050            | 472                   | 861            | ~•844          | •345          | 069              |              | -1.268           | 607               |
| 150           | •169<br>•063  | -•084<br>-•144 | 377<br>362            | 747<br>648     | -•732<br>-•688 | •165<br>•073  | 138<br>155       |              | -1.141<br>-1.036 | 614               |
| •250          | 033           | 117            | 252                   | 489            | 610            | 002           | 172              | 324          | -1.036<br>591    | 632<br>619        |
| • 350         | 015           | -136           | 222                   | 317            | 532            | 065           | 206              | 343          | 321              | 575               |
| • 450         | 074           | 168            | 223                   | 222            | 470            | 124           | 244              | 301          | 166              | 516               |
| •550          | 078           | 147            | 167                   | 133            | 394            | 116           | 227              | 274          | 182              | 461               |
| •650          | -•074         | 125            | 124                   | 115            | 334            | ~•096         | -•187            | 214          | 175              | 395               |
| •750          | 031           | 061            | 043                   | 069            | <b>-</b> •265  | 048           | 103              | 102          | 119              | 319               |
| •850<br>•900  | ●030<br>●064  | •021<br>•062   | .031<br>.070          | -±010          | 195<br>146     | •033          | •011             | •010         | 033              | -•2 <b>73</b>     |
| .,,,,         |               | 1002           | 1070                  | •027           | Right          | 51de          | •068             | •067         | •019             | 232               |
|               |               |                |                       |                |                |               |                  |              |                  |                   |
| ●025<br>●075  | 324           | •024<br>-•089  | •331<br>•151          | •602           | ·833           | 893           | 042              | • 364        | • 595            | • 760             |
| 150           | 330           | 123            | •065                  | • 368<br>• 233 | •575<br>•409   | 542<br>373    | -•125<br>-•142   | .162<br>.065 | •367<br>•240     | •552<br>•403      |
| •250          | 241           | 115            | •022                  | •159           | .304           | 296           | 163              | 007          | •13B             | • <del>4</del> 03 |
| 350           | 222           | 143            | ~.035                 | 072            | •194           | 297           | 194              | 064          | •059             | •190              |
| •450          | 207           | 166            | 087                   | .000           | .093           | 276           | 217              | 113          | 013              | 096               |
| •550          | 159           | 156            | 099                   | 028            | •0 <b>4</b> 8  | 255           | 210              | 126          | 045              | .041              |
| ●650          | 092           | 101            | 063                   | 021            | •015           | <b>-</b> ∎185 | 171              | 099          | 048              | .011              |
| •750          | 027           | 053            | 032                   | 016            | 002            | 077           | 084              | 035          | 025              | 007               |
| •850<br>•900  | •052<br>•083  | •033           | •038                  | •035<br>043    | -•002<br>- 003 | •035          | •034             | • 045        | •016             | 025               |
| 1,700         | 1003          | •066<br>Z      | •057                  | .043           | 021            | •076          | •062             | •059         | •022             | 073               |
|               |               |                | $b_{V} = 0.$          | 00             |                |               | 2/D <sub>V</sub> | =0.93        |                  |                   |
|               |               |                | ···                   | ····           | Left           | s ide         |                  |              |                  |                   |
| •000          | •551          | <b>●78</b> 5   | •618                  | ·288           | 123            | •616          | •833             | ●534         | .117             | 202               |
| •025          | • 362         | 100            |                       | -1.350         | 716            | •481          | 030              |              | -1.091           | 410               |
| •075          | •188          | 146            |                       | -1.211         | 727            | •364          | 045              | 903          | 449              | <b>-</b> •366     |
| ●150<br>●250  | •080<br>•014  | -•174<br>-•181 | 394<br>392            | -1.075<br>620  | 734<br>692     | •217<br>•063  | 109<br>214       | 635          | 460              | 387               |
| •350          | 044           | 217            | 272                   | 357            | 430            | 1003          | - 6 2 1 4        | 515          | -•458            | 402               |
| 450           | 101           | 276            | 383                   | 281            | 409            |               |                  |              |                  |                   |
| •550          | 140           | 305            | 440                   | 294            | 413            |               |                  |              |                  |                   |
| €650          | 130           | 273            | 312                   | 299            | -•422          | 204           | 409              | -•425        | 410              | 383               |
| •750          | 078           | 174            | 171                   | 270            | 432            | 162           | 213              | 203          | 394              | 379               |
| ●850<br>●900  | -•009         | -•021          | 028                   | 224            | 425            | 084           | 084              | 075          | 355              | 359               |
| • 900         | •026          | •025           | •024                  | 194            | -•415          | 034           | 032              | 027          | 330              | 346               |
|               | L             |                |                       |                | Right          |               |                  |              |                  |                   |
| ●025<br>●075  | -1.036<br>805 | 050<br>135     | •390                  | •602           | •742           | -1.057        | •071             | •510         | •706             | •815<br>700       |
| 150           | 346           | -•132          | •178<br>•089          | •384<br>•264   | •554<br>•421   | 847<br>476    | 025<br>077       | •351<br>•228 | •566<br>•440     | •728<br>•619      |
| 250           | 352           | -•163          | •011                  | 162            | 309            | 1770          | • 011            | <b>■∠∠</b> 0 | <b>*→*</b> ∪     | 1017              |
| •350          | 306           | 207            | 050                   | •0B0           | 221            |               |                  |              |                  |                   |
| •450          | 370           | 252            | 101                   | •019           | .144           |               |                  |              |                  |                   |
| •550          | 349           | <b></b> 285    | 141                   | 039            | •068           |               |                  |              |                  |                   |
| •650          | 320           | 268            | 132                   | 067            | •009           | 379           | 367              | 182          | 133              | 053               |
| •750          | -•139         | -•158          | ~.083                 | 081            | 049            | 185           | 201              | 151          | 207              | 166               |
| ◆850<br>◆900  | ♦006<br>♦058  | •014<br>•057   | •019<br>• <b>04</b> 9 | 043<br>051     | 074<br>125     | 046<br>.006   | 050<br>002       | -•039        | 159              | 162               |
| • 700         | • 000         | •091           | <b>3 (4</b> 7         | -1031          | -0125          | •008          | - 002            | 008          | 184              | 214               |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t$  = 0° - Continued (e)  $\alpha$  = 0°; M = 0.92

|                   | Cp for-        |                         |                |                  |                | Cp for-                |  |                |                  |                |  |
|-------------------|----------------|-------------------------|----------------|------------------|----------------|------------------------|--|----------------|------------------|----------------|--|
| l x               | B=-3.9         | B=0°                    |                | B=7.9°           | B=12.70        | B=-39                  |  | B=3.9°         |                  | B=12.7°        |  |
| $\frac{x}{C_{v}}$ | <u> </u>       | Z/                      | by = 0.1       | <u> </u>         | 1/-            | / <del> </del>         | <u>r                                      </u> | $b_V = 0.5$    | 17-              | 12.1           |  |
| "                 | Left side      |                         |                |                  |                |                        |  |                |                  |                |  |
|                   | Lett side      |                         |                |                  |                |                        |  |                |                  |                |  |
| •000              | •787           | 691                     | •634           | 466              | •106           | •614                   | •802   | •687           | •334             | 109            |  |
| •025<br>•075      | •283<br>•156   | 054<br>090              | 443<br>367     | 845<br>722       | -•854<br>-•744 | •325<br>•148           | ~•077<br><b>~•</b> 150                         |                | -1.209<br>-1.097 | 603<br>610     |  |
| 150               | 047            | 155                     | <b></b> 363    | 639              | 692            | •055                   | 170  |                | -1.002           | 630            |  |
| 250               | •018           | -•132                   | 271            | 530              | 613            | 018                    | 185  | 327            | 643              | 626            |  |
| • 350             | 032            | 155                     | <b>-</b> •231  | 354              | 532            | 084                    | 226  | <b>-</b> •351  | 498              | 580            |  |
| • 450             | -•096          | <b>-•192</b>            | 239            | 276              | -469           | 150                    | 269  | 356            | 156              | 515            |  |
| •550<br>•650      | 105<br>108     | 180<br>164              | 179<br>130     | 139<br>105       | 395<br>335     | 150<br>134             | 253<br>241                                     | -•247<br>-•237 | -•139<br>-•160   | -•461<br>-•399 |  |
| 750               | 057            | 086                     | 050            | 067              | -•273          | 074                    | 142  | 112            | -•122            | 326            |  |
| 850               | 010            | •007                    | .033           | 012              | 207            | .013                   | 001  | •008           | 041              | 276            |  |
| •900              | •049           | .054                    | •069           | •021             | 164            | •063                   | .062   | •069           | •012             | 244            |  |
|                   |                | Right side              |                |                  |                |                        |  |                |                  |                |  |
| •025              | 302            | •020                    | •337           | •603             | .831           | 830                    | 045  | •361           | •594             | .763           |  |
| •075              | 390            | -•090                   | .153           | .366             | ◆575           | -•609                  | 134  | .161           | .365             | •550           |  |
| • 150             | 356            | 129                     | •066           | •237             | •409           | 409                    | 154  | •063           | •234             | •401           |  |
| • 250<br>• 350    | -•272<br>-•245 | 129<br>162              | •021<br>••039  | .159<br>.070     | •304<br>•192   | 317<br>335             | -•177<br>-•213                                 | -•009<br>-•070 | •132<br>•049     | •279<br>•136   |  |
| 450               | 238            | 189                     | 093            | 002              | •192<br>•087   | ~.325                  | 243  | 122            | 023              | •092           |  |
| •550              | 183            | 184                     | 106            | 039              | •043           | 250                    | 236  | 142            | 058              | •034           |  |
| •650              | -•111          | 126                     | 071            | 035              | .004           | 230                    | 215  | 114            | 060              | •004           |  |
| •750              | -•046          | 079                     | 045            | 033              | 012            | 103                    | 126  | 045            | 038              | 016            |  |
| •850              | •038           | •019                    | •030           | •020             | 010            | •021                   | •021   | •038           | •005             | 035            |  |
| •900              | •073           | •053<br>Z/              | h = 0          | •032<br>66       | 036            | •065                   | -053<br>Z/h                                    | -055           | 800              | 083            |  |
|                   | $z/b_v = 0.66$ |                         |                |                  |                | z/b <sub>v</sub> =0.93 |  |                |                  |                |  |
|                   | -              |                         |                |                  | Left           | side                   |  |                |                  |                |  |
| •000              | •577           | <b>∙</b> 786            | •640           | •321             | 077            | •637                   | •834   | •561           | •157             | 176            |  |
| •025              | •339           | 112                     |                | -1.292           | -•718<br>720   | •446                   | 045  |                | -1.060           | 383            |  |
| •075              | •169<br>•060   | 163<br>192              | 850<br>556     | -1.164<br>-1.071 | 729<br>731     | .345<br>.195           | 052<br>113                                     | 883<br>781     | 462<br>487       | 367<br>391     |  |
| 250               | 006            | 197                     | 380            | -4858            | 702            | •039                   | 210  | 618            | 501              | -407           |  |
| ●350              | 067            | 230                     | 366            | 368              | 428            |                        |  |                |                  |                |  |
| •450              | 126            | 291                     | 312            | 239              | -•407          |                        |  |                |                  |                |  |
| •550              | 182<br>170     | -•353                   | -430           | 283              | 417            | _ 360                  | _ 614  | 6 1 4          | - 410            | [              |  |
| ●650<br>●750      | -•179<br>-•123 | 337<br>262              | -•391<br>-•197 | 312<br>287       | 430<br>440     | 308<br>192             | 517<br>298                                     | 516<br>241     | -•418<br>-•398   | 388<br>387     |  |
| 850               | 024            | 030                     | -029           | 238              | 433            | 092                    | 124  | 092            | 358              | - 364          |  |
| •900              | •011           | •028                    | .030           | 205              | 429            | 053                    | 061  | 034            | 335              | - 353          |  |
|                   | Right side     |                         |                |                  |                |                        |  |                |                  |                |  |
| •025              | 952            | 052                     | •384           | •598             | •744           | 944                    | •071   | •507           | •705             | .819           |  |
| ●075              | <b></b> 780    | 145                     | •175           | •378             | •552           | 848                    | 028  | •348           | •561             | •729           |  |
| •150              | 477            | <b>~•146</b>            | •086           | •257             | •418           | -•688                  | 082  | •225           | •434             | •625           |  |
| • 250<br>• 350    | -•372<br>-•351 | 179<br>217              | •007<br>-•056  | •158<br>•074     | •306<br>•216   |                        |  |                |                  | į              |  |
| 450               | 314            | -•217<br>-•2 <b>6</b> 9 | 106            | .011             | 137            |                        |  |                |                  |                |  |
| •550              | 419            | 328                     | 156            | 052              | 062            |                        |  |                |                  |                |  |
| 650               | 374            | 326                     | 148            | 084              | •006           | 5 <b>0</b> 2           | -+470  | 241            | 160              | 064            |  |
| •750              | 213            | 262                     | 100            | 102              | -•061          | 254                    | 300  | -•158          | 237              | 184            |  |
| •850<br>•000      | 003            | •006                    | •015           | 060              | 080            | 079                    | 108  | 037            | 175              | 165            |  |
| 900               | ●052           | •058                    | ●045           | 072              | 135            | -•020                  | 041  | -•005          | 202              | 217            |  |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t=0^\circ$  - Continued (f)  $\alpha=9.4^\circ$ ; M=0.60

|                |                |                        | Cp 1          | or-                   |                  |                |               | p for-        |              |              |
|----------------|----------------|------------------------|---------------|-----------------------|------------------|----------------|---------------|---------------|--------------|--------------|
| }              | B=-3.99        | R=0°                   | B=39°         | B=7.9°                | B=12.70          | B=-3.9°        | B=0°          | B=3.9°        |              | B=12.7°      |
| <u> </u>       | p = 13.5       |                        | $b_V = 0.1$   |                       | 1/               |                | 2/1           | $b_{V} = 0.3$ | 88           |              |
| <b>5</b> v     |                |                        | JV - U.1      |                       | left s           | ide            |               |               |              |              |
|                | _              |                        |               |                       | Lerr 3           | T              |               | 105           | 939          | -1.220       |
| 000            | •442           | .821                   | •473          | 681                   | -1.137           | •132<br>•355   | •691<br>-•095 | •105<br>-•782 | -1.563       | - 994        |
| 025            | 004            | 129                    | 258           | 794                   | -2.065<br>-1.040 | 173            | 129           |               | -1.388       | 966          |
| 075            | •034           | 118                    | 318           | 549<br>455            | 607              | 089            | 132           | 357           | 699          | 920          |
| 150            | •000           | 141                    | 318<br>228    | 324                   | 420              | •025           | 134           | 297           | 340          | 858<br>722   |
| 250            | •002<br>-•014  | ~•093<br><b>~•</b> 102 | 205           | 268                   | 347              | 020            | 152           | -•267         | 324<br>287   | 575          |
| 350<br>450     | 032            | 111                    | 198           | 238                   | 342              | 052            | 159           | 242<br>182    | 234          | - 462        |
| 550            | 032            | 091                    | 159           | 192                   | 273              | 036<br>016     | 118<br>084    | 134           | 178          | 388          |
| 650            | 007            | 057                    | 113           | 153                   | 211<br>158       | •009           | 029           | 070           | 107          | 317          |
| 750            | •009           | 025                    | 063           | 093<br>019            | 150<br>091       | 055            | •034          | .018          | 024          | 231          |
| 850            | •04B           | •037                   | •004<br>•043  | •017                  | 045              | 082            | .068          | €057          | •020         | 171          |
| 900            | •071           | •066                   | •043          | •017                  | Right            | side           |               |               |              |              |
|                |                |                        |               |                       |                  | 681            | 052           | •395          | •612         | .718         |
| 025            | 194            | 036                    | •022          | •534<br>•349          | .815<br>.545     | 451            | 107           | .195          | • 402        | •547         |
| 075            | 328            | 127                    | .038<br>.015  | 239                   | 393              | 344            | 116           | •093          | •271         | •407         |
| 150            | 307            | 129<br>100             | .004          | 186                   | .299             | 271            | 122           | •036          | •179         | •296<br>•225 |
| 250            | -•239<br>-•212 | 102                    | 010           | •107                  | .202             | 250            | 129           | 001<br>028    | •117<br>•061 | •153         |
| 350<br>450     | 198            | 111                    | 033           | .050                  | •123             | 225            | 134<br>113    | 028           | •036         | .107         |
| 550            | 150            | 093                    | 026           | •031                  | •089             | -•180<br>-•123 | 075           | 005           | •041         | .091         |
| 650            | 100            | 050                    | 005           | •031                  | •075<br>•070     | 050            | 013           | .027          | •057         | •075         |
| 750            | 052            | 009                    | •022          | •045<br>•073          | •080             | 032            | •057          | .068          | •087         | •068         |
| 850            | •023           | •048<br>•068           | •064<br>•073  | .082                  | •0B2             | •059           | •073          | •080          | .080         | •038         |
| 900            | 1099           |                        | 1by = 0       |                       |                  |                | Z/E           | $v_v = 0.93$  | 3<br>        |              |
|                | <b> </b>       |                        |               |                       | Left             | side           |               |               |              |              |
|                |                |                        | - 051         | 635                   | 851              | .169           | •666          | 198           | 621          | - 443        |
| •000           | 4025           | .650<br>122            | 051<br>-1.044 | 992                   | 632              | •506           | 032           | 920           | 773          | 443<br>453   |
| 025<br>075     | •378<br>•207   | 127                    | 578           | 948                   | 628              | •424           | •032          | 684<br>440    | 549<br>542   | - 480        |
| 150            | 112            | 132                    | 408           | 895                   | 616              | •337           | •021          | 272           | 517          | - 483        |
| 250            | .062           | 120                    | 316           | 780                   | 582              | •246           | 020           |               |              |              |
| • 350          | •030           | 125                    | 279           | 616                   | 561<br>538       |                |               |               |              |              |
| • 450          | •009           | 129                    | 251<br>215    | 459<br>351            | 506              | ĺ              |               |               |              | 4.07         |
| • 550          | -•016<br>•005  | -•125<br>-•079         | 157           | 257                   | 478              | 004            | 109           | 187           | 289          | 407<br>386   |
| •650<br>•750   | •025           | 034                    | 084           | 181                   | 450              | 014            | 079           | 129           | 243<br>197   | 354          |
| .850           | 1046           | .014                   | 015           | 114                   | 402              | •000           | 032<br>.003   | 065<br>015    | 171          | - 328        |
| 900            | .064           | •041                   | •018          | 077                   | 388              | •021           |               |               |              |              |
|                |                |                        |               |                       |                  | ht side        |               | . 5.5.6       | •653         | •690         |
| .025           | 922            | 036                    | •425          | •605                  | •670             | 925<br>581     | •093<br>•071  | •556<br>•441  | 614          | 732          |
| 075            | 503            | 102                    | .222          | •418                  | •541<br>•428     | 314            | •071          | 374           | •568         | •723         |
| .150           | 348            | 100                    | .133          | •303<br>•2 <b>2</b> 3 | 1345             | -•>**          |               |               |              |              |
| • 250          | 296            | 109                    | •075<br>•041  | • 165                 | 269              | ì              |               |               |              |              |
| • 350          | 269            | 111<br>109             | .018          | •                     |                  | 1              |               |               |              |              |
| • 450<br>• 550 | 189            | 109                    | .015          |                       | .163             | 1              | 474           | •027          | .087         | •11          |
| •650           | 134            | 063                    | •025          | .080                  |                  | 164            |               | 005           | .011         | 01           |
| 750            | 071            | 009                    |               |                       |                  | 0116           |               | .036          | 003          | 06           |
| .850           | •018           | •046                   |               |                       |                  | 014            |               | .048          | 031          | 11           |
| 900            | •052           | •068                   | •091          | 10/2                  |                  |                |               |               |              |              |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t$  = 0° - Continued (i)  $\alpha$  = 9.7°; M = 0.90

|                   |  |                |                | for-                  |         |                         |                        | Cp for         |                |       |
|-------------------|--|----------------|----------------|-----------------------|---------|-------------------------|------------------------|----------------|----------------|-------|
| $\frac{x}{C_{v}}$ | B=-3.9   | B=0°           |                |                       | B=12.70 | B=-3.9°                 | B=0°                   | B=39°          |                | B=127 |
| $c_{v}$           |  | z,             | 1bv = 0.       | //                    |         |                         | Z                      | by = 0.        | 17             | 1     |
|                   | ļ  |                |                |                       | Left s  | ide                     |                        | -, -,          |                |       |
| • 000             | •344   | •925           | •460           | 160                   |         | •536                    | ●764                   | •575           | •147           |       |
| ●025<br>●075      | -•081<br>•036                                  | 088<br>106     | 039<br>257     | 455                   |         | •335                    | 092                    | -1.001         | -1.342         |       |
| • 150             | •014   | 159            | 410            | -•488<br>-•577        |         | •163                    | 141                    | 667            | -1.196         |       |
| • 250             | .001   | 117            | 301            | 481                   |         | ●084<br>●018            | 143<br>159             | 463<br>332     | -•783<br>-•519 |       |
| • 350             | 030  | 127            | 262            | 338                   |         | 042                     | 198                    | -•348          | 424            |       |
| • 450             | ~•057  | 162            | 274            | <b>~</b> •293         |         | 088                     | 224                    | 323            | 396            |       |
| •550<br>•650      | -•048<br>-•042                                 | 127            | 199            | 243                   |         | 072                     | 183                    | <b>-</b> •250  | 301            |       |
| • 750             | 013  | 100<br>055     | 155<br>090     | -•203<br>-•158        |         | 052                     | -•142                  | <b>-</b> •178  | 246            |       |
| 850               | 040  | •024           | 004            | -•158<br>-•073        |         | 013                     | 067                    | 083            | 172            |       |
| 900               | 077  | •067           | •047           | 019                   |         | •052<br>•092            | •029<br>•078           | •020           | <b></b> 081    |       |
|                   |  |                |                |                       | Right   | side                    | -078                   | •075           | 026            |       |
| •025              | •045   | •021           | 025            | • 336                 |         | 908                     | 023                    | •397           | •608           |       |
| •075              | 262  | <b>-</b> •107  | •053           | •315                  |         | 563                     | 099                    | •197           | •390           |       |
| •150<br>•250      | 376<br>274                                     | 127<br>103     | •046           | •252                  |         | 395                     | 117                    | •105           | .268           |       |
| 350               | 262  | -•103<br>-•117 | •014<br>-•015  | •187<br>•106          |         | -•3 <b>0</b> 9          | 135                    | •038           | <b>•174</b>    |       |
| 450               | 269  | 151            | <b>~•</b> 047  | •027                  |         | 325<br>288              | -•162<br>-•177         | 012            | •105           |       |
| • 550             | 201  | 126            | 046            | •004                  |         | <b>-</b> • 2 <b>4 4</b> | 161                    | -•051<br>-•052 | •041<br>•014   |       |
| 650               | 129  | ~•091          | 031            | 009                   | }       | -164                    | 119                    | 028            | •012           |       |
| •750              | -•068  | 043            | •004           | •012                  |         | 060                     | 034                    | •014           | •024           |       |
| •850<br>•900      | •021   | •039           | •062           | <b>•047</b>           |         | •040                    | •052                   | •074           | .044           |       |
| 1900              | •060   | •066           | .077           | •045                  |         | •080                    | •070                   | •080           | •035           |       |
|                   | <u> </u>                                       |                | $b_{v} = 0.$   | 56                    |         |                         | Z/b                    | -0.93          |                |       |
|                   | ļ. <u>.                                   </u> |                |                |                       | Left    | s ide                   |                        |                |                |       |
| • 000             | •433   | •711           | •450           | • <b>0</b> 2 <b>7</b> | ļ       | •453                    | •743                   | •272           | 265            |       |
| ♦025<br>•075      | ●356<br>●195                                   | 138            | -1.143         | 875                   |         | •511                    | 016                    |                | -1.095         |       |
| •150              | 101  | 151<br>165     | 970<br>464     | -•830<br>-•797        | 1       | • 4 4 6                 | •012                   | <b>-</b> ∙892  | 461            |       |
| • 250             | •049   | ~.158          | 387            | <b></b> 702           |         | •340<br>•211            | -•017<br>-•092         | <b>-</b> •759  | 450            |       |
| • 350             | •013   | 173            | 295            | 554                   | 1       | 4211                    |                        | -•588          | 459            |       |
| • 450             | 021  | <b></b> 202    | 348            | 447                   | 1       |                         |                        |                |                |       |
| •550              | -4057  | 212            | 312            | 374                   | [       |                         |                        |                |                |       |
| .650<br>.750      | ~•045<br>~•010                                 | 165<br>082     | 203            | 320                   |         | 081                     | <b>~</b> •2 <b>0</b> 8 | <b></b> 233    | 404            |       |
| .850              | •032   | ~•082<br>•000  | -•104<br>-•009 | -•269<br>-•220        | - 1     | -•062                   | 129                    | 141            | -•370          |       |
| 900               | •060   | •041           | •039           | 187                   | ĺ       | -•018<br>•009           | -•043<br>•001          | 056            | -•308          |       |
|                   |  |                |                |                       | Right   |                         |                        | 009            | -•270          |       |
| •025              | -1.092   | 020            | •416           | •60a                  | 11/9//  | -1.171                  | •134                   | •573           | 721            |       |
| •075              | 868  | 108            | •219           | 410                   | ľ       | -10171<br>-0774         | 083                    | 4773           | •731<br>•666   |       |
| •150<br>•250      | 348  | 106            | •140           | • 305                 | ŀ       | 508                     | .062                   | 390            | •591           |       |
| •250<br>•350      | 374<br>284                                     | 127            | •077           | •222                  | 1       |                         |                        | •              |                |       |
| 450               | -•284<br>-•319                                 | -•143<br>-•165 | •042<br>•008   | •164<br>•114          | ļ       |                         |                        |                |                |       |
| 550               | 283  | 171            | 016            | •067                  | 1       |                         |                        |                |                |       |
| ∙650              | 209  | 138            | 015            | •040                  | 1       | 234                     | 163                    | ~.035          | . 01.6         |       |
| •750              | ~•099  | 063            | •008           | •014                  |         | 139                     | 119                    | 051            | •010<br>-•081  |       |
| 1                 | •022   | •043           | .070           | 013                   |         | 023                     | 004                    | •026           | 071            |       |
| •850<br>•900      | •071   | .066           |                |                       |         |                         |                        |                |                |       |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t=0^\circ$  - Continued (j)  $\alpha=9.7^\circ$ ; M=0.92

| Γ            |                |                | Cp            | for-           | <del></del> |                |                | Cp for                |                 |             |
|--------------|----------------|----------------|---------------|----------------|-------------|----------------|----------------|-----------------------|-----------------|-------------|
| x            | B = -3.9       | B=0°           | :             | · B=7.9°       | B=12.7°     | B=-3.9°        |                | B=3.9°                | -<br>B=7.9°     | B=127°      |
| <u>x</u>     |                | Z              | 1by = 0.      | //             | 1/          | 75 0.0         | ·              | by = 0.               | 17-             | D-12.7      |
|              |                |                | <u></u> -     | <u></u>        | Left s      | ide            |                | -, 0.0                |                 |             |
| •000         | +344           | •945           | •474          | 130            | ·           | •565           | •757           | •596                  | •180            |             |
| •025<br>•075 | -•067<br>•051  | -•047<br>-•064 | •024<br>••183 | -•390<br>-•437 |             | •339           | 049            |                       | -1.329          |             |
| 150          | 035            | 123            | 344           | 543            |             | •175<br>•086   | -•103<br>-•113 | -•466<br>-•404        | -1•194<br>-•777 |             |
| •250         | •018           | 095            | 269           | 503            |             | •023           | 140            | 318                   | 507             |             |
| • 350        | 020            | 111            | 249           | 377            |             | 041            | 186            | 348                   | 366             |             |
| • 450        | 057            | 157            | 278           | 289            |             | 095            | <b>22</b> 2    | 352                   | 397             |             |
|              | 054<br>049     | -•132<br>-•112 | 211<br>159    | 240<br>208     |             | 080            | 187            | 254                   | 310             |             |
| 750          | 025            | 066            | 091           | 161            |             | 066<br>027     | 148<br>076     | 193<br>093            | 256<br>189      |             |
| ●850         | •029           | •018           | 012           | 085            |             | •041           | •023           | •013                  | 097             |             |
| •900         | ●065           | •056           | •037          | 034            |             | .080           | •072           | .069                  | 044             |             |
|              |                |                |               |                | Right       | side           |                |                       |                 |             |
| •025         | •123           | .064           | •000          | ●257           |             | 824            | 002            | •408                  | •617            |             |
| ●075<br>●150 | -•185<br>-•318 | -•064<br>-•092 | •072          | • 312          |             | 468            | 071            | •208                  | .400            |             |
| •250         | 246            | -•092<br>-•078 | •069<br>•042  | •272<br>•203   |             | -•355<br>- 361 | 088            | •115                  | •272            |             |
| •350         | - 247          | 103            | •003          | •113           |             | 291<br>324     | 113<br>152     | •045<br><b>-</b> •007 | •176<br>•100    |             |
| • 450        | 271            | 145            | 040           | •031           |             | 303            | 176            | 052                   | •037            |             |
| .550         | 206            | <b>-</b> •125  | 048           | 001            |             | 252            | 161            | 058                   | •004            |             |
| •650         | 140            | -•098          | 040           | 015            |             | 178            | 124            | 034                   | •001            |             |
| ●750<br>●850 | 075            | <b>~•</b> 055  | 005           | •004           |             | 075            | 057            | •004                  | •009            |             |
| •900         | •012<br>•048   | ∙035<br>•060   | •050<br>•062  | •032<br>•032   |             | •029<br>•069   | •051<br>•068   | •065                  | •031            |             |
|              |                |                | /bv = 0.      |                |             | 1007           |                | •072<br>•=0.93        | •015            |             |
|              |                |                |               |                | Left        | s ide          |                | 0.00                  |                 | <del></del> |
| •000         | •450           | •709           | .460          | •048           |             | <b>▲479</b>    | •738           | •307                  | 225             |             |
| <b>.</b> 025 | <b>●3</b> 52   | 103            | -1.062        | 932            |             | 498            | 020            |                       | 1.065           |             |
| •075         | •193           | 121            | 901           | 851            |             | •430           | .031           | 841                   | 455             |             |
| ●150<br>●250 | •097           | 141            | -•396         | 820            |             | •326           | 004            | 706                   | 446             |             |
| •350         | ●044<br>●006   | -•143<br>-•165 | 383<br>351    | -•716<br>-•552 |             | •195           | 080            | ~.559                 | 450             |             |
| •450         | 033            | 197            | 332           | 439            |             |                |                |                       |                 |             |
| ●550         | 070            | 210            | 358           | 375            |             |                |                |                       |                 |             |
| •650         | -•058          | 176            | 215           | 333            | 1           | 107            | 223            | 241                   | 418             |             |
| €750<br>-050 | <b>-•026</b>   | 092            | 111           | 289            | 1           | 080            | 135            | 151                   | 387             |             |
| ◆850<br>◆900 | ●019<br>●047   | 006<br>.039    | 016           | 244            |             | 030            | 047            | 052                   | 339             |             |
| • 700        | •041           | •039           | •032          | 218            | Right       | side           | <b>~•00</b> 2  | -•009                 | -•309           |             |
| .025         | -1.026         | 008            | •416          | •601           | ""y"        | -1.113         | •135           | •568                  | . 730           |             |
| ●075         | 726            | 094            | .221          | 408            |             | 730            | •088           | • 768<br>• 466        | ∙730<br>•659    |             |
| •150         | 348            | 092            | •142          | •301           | ı           | 451            | .060           | •381                  | •585            | Į.          |
| 250          | 367            | -•116<br>- 125 | •077          | •221           | Ì           |                |                |                       |                 | •           |
| •350<br>•450 | -•293<br>-•318 | 135<br>164     | •037<br>•001  | •163<br>•109   | ŀ           |                |                |                       |                 |             |
| 550          | 297            | -•104<br>-•177 | 024           | •109<br>•059   |             |                |                |                       |                 |             |
| •650         | -•235          | 148            | 028           | 028            |             | 254            | 178            | 049                   | 007             | ļ           |
| •750         | 112            | 092            | 007           | 009            | ļ           |                | 125            | 066                   | 105             |             |
| 850          | •015           | •048           | 061           | 007            | ļ           | 031            | 010            | •016                  | 093             | ı           |
| 900          | •063           | ●066           | •076          | 034            |             | •015           | •023           | ●032                  | 134             |             |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t=0^\circ$  - Continued (k)  $\alpha=15.6^\circ$ ; M = 0.60

|                   |                |                | Cp           | for-           |                | <u> </u>      |                | Cp for                | <del> </del>   |                |
|-------------------|----------------|----------------|--------------|----------------|----------------|---------------|----------------|-----------------------|----------------|----------------|
| l x               | B=-3.9         | \$=0°          | B=39         | B=7.90         | B=12.70        | B=-3.9°       | B=0°           | B=39°                 | B=7.9°         | B=127°         |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.      | //             | 1′             |               | <del></del>    | by = 0.3              | 1.7            | <i>V</i>       |
| *                 |                | <u> </u>       |              |                | Left s         | ide           |                |                       |                |                |
|                   |                |                |              |                |                | <del></del> - |                |                       |                |                |
| •000<br>•025      | 373<br>606     | •829<br>-•116  | •223<br>•315 | •093<br>•114   | 424<br>433     | •299<br>•124  | •730<br>••100  | •282<br><b>-</b> •328 | -•475<br>-•698 | 932<br>951     |
| •075              | 158            | <b></b> 129    | •029         | 083            | 389            | •054          | 141            | 303                   | 517            | 816            |
| •150              | -•040          | 155            | 130          | 191            | 382            | •050          | -•136          | 264                   | 402            | - +663         |
| • 250<br>• 350    | •017<br>•033   | -•118<br>-•095 | 139<br>160   | 179<br>189     | 324<br>287     | •040          | 141            | <b>-</b> •250         | 345            | 545            |
| •450              | •038           | 113            | 171          | 186            | -•252<br>-•252 | •020          | -•155<br>-•166 | 241<br>220            | 303<br>262     | -•449<br>-•377 |
| •550              | •038           | 097            | - 139        | 150            | 201            | •022          | ~•132          | 178                   | 216            | 317            |
| .650              | •045           | 067            | 095          | 111            | 152            | •029          | 102            | 135                   | 170            | 261            |
| •750              | •047           | 033            | 059          | 074            | 115            | •038          | 049            | 077                   | 106            | 192            |
| •850<br>•900      | •057<br>•061   | •018<br>•045   | 010<br>.013  | 021<br>.006    | ~•062<br>-•025 | •057          | •015           | 012                   | -•051          | 129            |
| • 700             | •001           | 1049           | +            | 1006           | Right          | 5/de          | •041           | •022                  | 012            | 087            |
|                   |                |                |              |                |                |               |                |                       |                |                |
| •025<br>•075      | •341<br>•001   | -•113<br>-•175 | 759<br>234   | 271<br>072     | 097            | 385           | 088            | •112                  | •169           | •168           |
| 150               | 131            | -•150          | 054          | •006           | •029<br>•100   | 311<br>274    | -•127<br>-•129 | •052<br>•043          | •121<br>•114   | •223<br>•254   |
| •250              | ~.151          | 113            | .020         | •059           | •156           | 246           | 127            | •052                  | 119            | 272            |
| • 350             | -•167          | 095            | •038         | .080           | •182           | 232           | 136            | .045                  | •116           | 268            |
| • 450             | 179            | 118            | •038         | •089           | •179           | 214           | 141            | •029                  | .110           | •251           |
| •550<br>•650      | 142<br>094     | 100            | •043         | •087           | • 154          | 172           | 127            | •029                  | •107           | •223           |
| •750              | 057            | 061<br>024     | •045<br>•050 | •082<br>•084   | •128<br>•110   | 131           | -•086<br>-•040 | ●043<br>●052          | •103<br>•098   | •191<br>•161   |
| 850               | •001           | •025           | •066         | •084           | •093           | 003           | •029           | •073                  | •098           | 133            |
| •900              | •022           | •045           | .066         | .082           | •080           | •024          | .038           | •068                  | •089           | •112           |
|                   |                | Z/             | by = 0.      | 66             |                |               | Z/b,           | -0.93                 |                |                |
|                   |                |                |              |                | Left           | s ide         |                |                       |                |                |
| •000              | 047            | •634           | •008         | 631            | 781            | 015           | •622           | ~.402                 | 838            | 507            |
| ●025              | •421           | 113            | -1.063       | -1.269         | 781            | 555           | •004           | 934                   | 686            | - 491          |
| •075              | •253           | 127            | 582          | -1.147         | 753            | •498          | .066           | 810                   | 606            | - 454          |
| •150              | • 163          | 127            | 407          | 838            | 714            | •438          | • 064          | 508                   | 574            | 463            |
| • 250<br>• 350    | •121<br>•089   | 116<br>120     | 310<br>273   | -•507<br>-•368 | -•654<br>-•577 | •338          | •029           | 314                   | 523            | 449            |
| 450               | •068           | -•123          | 245          | -•285          | -+5//<br>-+496 |               |                |                       |                |                |
| •550              | •050           | 118            | 204          | 239            | 415            |               |                |                       |                |                |
| <b>∗</b> 650      | •047           | 081            | 144          | 166            | 331            | •045          | 109            | 174                   | 205            | 264            |
| •750              | •061           | 035            | 079          | 115            | 280            | •024          | 081            | <b></b> 123           | 157            | 217            |
| •850<br>•900      | •063<br>•070   | •004<br>•027   | 017<br>.015  | 053<br>028     | 220<br>194     | ●029<br>●043  | 028            | 052                   | 106            | 187            |
| 1 • ,00           | •070           | •021           | •019         |                | Right          | <b>.</b>      | -•005          | -•015                 | 083            | 166            |
|                   | 990            |                |              |                |                |               |                |                       |                |                |
| ●025<br>●075      | 562            | 049<br>109     | •451<br>•259 | •591<br>•403   | •571<br>•476   | -1.068<br>669 | •082<br>•110   | ∙568<br>•499          | •649<br>•635   | •655<br>•722   |
| •150              | 366            | 095            | .176         | •300           | •407           | 357           | 121            | • 469                 | •621           | 718            |
| • 250             | 299            | 102            | •130         | .243           | •360           |               | •              |                       |                | ****           |
| • 350             | 267            | 107            | •100         | •197           | •326           |               |                |                       |                |                |
| • 450<br>• 550    | 228<br>191     | 102            | •077         | •174           | •295           |               |                |                       |                |                |
| •650              | -•191<br>-•133 | -•090<br>-•063 | •070<br>•064 | •146<br>•132   | •265<br>•216   | 121           | DE /           | . 464                 | 1.0            | .,, 1          |
| 750               | 066            | ~.031          | •066         | •116           | •172           | 131<br>100    | -•054<br>-•063 | ∙084<br>•036          | •142<br>•061   | •212<br>•098   |
| ●850              | •010           | •029           | .084         | •110           | •126           | 017           | •004           | •059                  | •052           | 056            |
| •900              | •043           | •052           | •093         | 098            | •087           | •010          | .027           | •059                  | •038           | 008            |
|                   |                |                |              |                |                |               |                |                       |                |                |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t$  = 0° - Continued (1)  $\alpha$  = 15.8°; M = 0.80

|                   |                      |                | Cp                         | for-           |                |                | (                                       | Cp for         | _              | -          |
|-------------------|----------------------|----------------|----------------------------|----------------|----------------|----------------|---|----------------|----------------|------------|
| X                 | B = -3.9°            | B=0°           | B=3.9°                     | B=7.9°         | B=12.7°        | B=-3.9°        | B=0°                                    | B=3.9°         | B=7.9°         | B=127      |
| $\frac{x}{c_{v}}$ |                      | Z/.            | by = 0.1                   | 1              |                |                | Z/.                                     | by = 0.3       | 38             |            |
|                   |                      |                |                            |                | Left s         | ide            |   | · •            |                |            |
| •000<br>•025      | •005<br><b>-•920</b> | •876<br>•122   | •477<br>•336               | •096<br>•017   | 327            | •319<br>••012  | •785                                    | •282           | 285            | 57         |
| •075              | ~•513                | 079            | •022                       | 136            | 444<br>400     | 070            | 060<br>148                              | 326<br>326     | -,554<br>-,468 | 65         |
| •150              | 241                  | 183            | 185                        | 241            | 384            | 053            | 152                                     | 302            | 407            | 52         |
| • 250             | 119                  | 141            | 178                        | 212            | 333            | 030            | 155                                     | 282            | 366            | - 47       |
| • 350             | 050                  | 100            | 187                        | 203            | 283            | 026            | 169                                     | 276            | 336            | 42         |
| • 450             | 009                  | 120            | 204                        | 195            | <b>-•238</b>   | 018            | 178                                     | 248            | 288            | 35         |
| •550<br>•650      | .016<br>.034         | 088            | 145                        | 140            | 184            | •008           | 138                                     | 202            | 238            | 30         |
| •750              | •046                 | 047<br>016     | ~•095<br>-•058             | 093<br>067     | 141<br>105     | •020           | 099                                     | 149            | 185            | 2          |
| •850              | •060                 | •030           | 012                        | 017            | -•105<br>-•049 | •063           | 047<br>.021                             | 087<br>018     | -•121<br>-•055 | 19         |
| • 900             | •068                 | •060           | •014                       | •009           | 010            | •077           | •060                                    | •023           | 015            | 13<br>08   |
|                   |                      |                | ·                          |                | Right          | side           | *************************************** |                |                | •••        |
| • 025             | •374                 | 765            | 952                        | 419            | 294            | 408            | 232                                     | 043            | 014            | •02        |
| •075<br>•150      | -•022<br>-•189       | 449<br>238     | 596                        | - 238          | 171            | 355            | 242                                     | 084            | 040            | •09        |
| • 250             | 189                  | 134            | 277<br>124                 | 157<br>075     | 050<br>.053    | 318<br>284     | 193<br>144                              | 064            | 015            | .14        |
| • 350             | - 200                | 063            | 055                        | 014            | •117           | 266            | 125                                     | 026<br>009     | •021           | •21        |
| . 450             | 209                  | 062            | 012                        | •029           | •154           | - 240          | -125                                    | -•009<br>-•001 | •045<br>•064   | •23<br>•24 |
| •550              | 151                  | 042            | .017                       | •052           | 154            | 197            | 097                                     | •014           | •079           | 23         |
| •650              | 090                  | 015            | •034                       | •067           | •139           | 137            | 056                                     | •034           | •091           | .21        |
| • 750             | 048                  | •015           | •048                       | •070           | ·148           | 067            | 007                                     | •052           | .102           | •18        |
| .850<br>.900      | 001                  | •056           | •068                       | •087           | •106           | 003            | •051                                    | •075           | •102           | • 15       |
| •900              | •017                 | •067<br>Z/     | $\frac{.068}{b_{V} = 0.0}$ | •084<br>66     | •094           | •027           | 7.h                                     | •075<br>•=0.93 | •097           | •13        |
|                   | <b></b>              |                | Dy - 0.1                   |                | Left           | s ide          | -/ 50                                   | -0.93          |                |            |
| •000              | 4339                 | 400            | 4.25                       | ^22            |                | <del> </del>   |   |                |                |            |
| •025              | •350                 | •680<br>••088  | •425<br>-1•104             | •023<br>-1•150 | 375<br>640     | •278           | <b>∗684</b>                             | •057           | 468            | 43         |
| •075              | 189                  | 126            | -11104                     | -1.006         | 618            | ●556<br>●498   | •022<br>•080                            | 871<br>739     | 772<br>401     | - 44       |
| •150              | •114                 | 135            | 422                        | 784            | 588            | 419            | •056                                    | -•615          | 601<br>569     | 39<br>39   |
| • 250             | •089                 | 125            | 320                        | 520            | 545            | -305           | •008                                    | 342            | 544            | - 38       |
| • 350             | •074                 | 126            | 282                        | 383            | <b></b> 503    |                |   | •              |                | • • •      |
| • 450             | •051                 | 137            | 259                        | 304            | 442            |                |   |                |                |            |
| •550<br>•650      | •034<br>•039         | 131            | 216                        | <b>~</b> •246  | 381            |                |   |                |                |            |
| •750              | •056<br>•056         | 091<br>044     | 149<br>080                 | 169<br>113     | 309<br>266     | •014           | <b>~</b> •129                           | 188            | 217            | - • 23     |
| •850              | •066                 | •010           | ~.003                      | -•113<br>-•049 | -•266<br>-•220 | -•001<br>•016  | -•094<br>-•028                          | 124<br>047     | 159<br>102     | 20<br>16   |
| • 900             | •077                 | •042           | .028                       | 020            | 192            | •034           | •011                                    | 006            | 076            | 14         |
|                   |                      |                |                            |                | Right          | side           |   |                |                |            |
| •025<br>•075      | -1.185<br>562        | -•091<br>-•129 | •374<br>•181               | ∙562<br>•358   | •641<br>•519   | 897            | •100                                    | •565           | •696           | •77        |
| •150              | 387                  | 091            | •123                       | •268           | •519<br>•451   | -•673<br>-•568 | •128<br>•128                            | .496<br>.445   | •666           | •80<br>•77 |
| • 250             | 324                  | 086            | .095                       | •218           | 400            | 1              | •120                                    | # <b>**</b> *3 | •617           | • / /      |
| • 350             | 287                  | 089            | •072                       | •183           | 367            |                |   |                |                |            |
| 450               | -•249                | <b>-</b> •085  | •060                       | •161           | •340           |                |   |                |                |            |
| • 550             | 206                  | 076            | •046                       | .138           | •303           |                |   |                |                |            |
| •650              | 145                  | 050            | •049                       | •123           | •260           | 142            | 053                                     | •048           | •123           | .24        |
| •750              | 071                  | 008            | •059                       | •113           | •211           | 105            | 060                                     | •011           | •052           | •12        |
| •850<br>•900      | .020<br>.057         | ∙056<br>•077   | •092<br>•097               | •119<br>•102   | •159<br>•112   | 022            | •019                                    | •049           | •052           | •10        |
| • 700             | •097                 | •077           | •U91                       | <b>●</b> 102   | 1112           | •017           | •042                                    | •059           | •029           | •02        |

TABLE V.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE REARWARD POSITION;  $i_t=0^\circ$  - Concluded (m)  $\alpha=15.9^\circ$ ; M=0.85

|                |                |                | Cp                    | for-             |         |              |                | Cp for         | _              |         |
|----------------|----------------|----------------|-----------------------|------------------|---------|--------------|----------------|----------------|----------------|---------|
| <u> x</u>      | B=-3.9         | B=0°           | B=39                  | B=7.9            | B=12.7° | B=-3.9       | · B =0°        | B=3.9°         | B=7.9°         | B=12.70 |
| <u>x</u>       |                | Z              | by = 0.               | //               |         |              | Z              | /by = O.       | <del>38</del>  |         |
|                |                |                |                       |                  | Left s  | ide          |                |                |                |         |
| •000           | •312           | •905           | •652                  | •075             |         | •372         | •781           | •290           | 311            |         |
| ●025<br>●075   | -1.074<br>562  | •049<br>-•157  | •196<br><b>-</b> •073 | 117<br>246       |         | 016<br>126   | -•143<br>-•226 | -•198<br>-•456 | 632<br>543     |         |
| 150            | 315            | - 276          | 297                   | 345              |         | -133         | -•220<br>-•220 | -•416          | 484            |         |
| • 250          | 209            | 219            | 271                   | -6287            |         | 116          | 204            | 36B            | 427            |         |
| •350           | 145            | 159            | 247                   | 260              |         | 110          | 217            | 338            | 380            |         |
| •450<br>•550   | -•094<br>-•047 | 169<br>119     | 256<br>181            | -•237<br>-•172   |         | 093<br>050   | -•230<br>-•177 | 310<br>253     | -•337<br>-•274 |         |
| 650            | 013            | 075            | 130                   | 123              |         | 024          | 133            | 194            | 219            |         |
| •750           | •013           | 035            | 087                   | 098              |         | •003         | 075            | 130            | 150            |         |
| •850           | •037           | •021           | 034                   | 038              |         | •040         | •002           | 053            | 078            |         |
| • 900          | •050           | •046           | 007                   | 011              | 77.41   | •057         | •049           | 013            | 033            |         |
|                |                | ····           |                       | <del></del>      | Right   | side         |                |                |                |         |
| •025<br>•075   | •282<br>••100  | -•694<br>-•882 | -1.007<br>668         | -•489<br>-•330   |         | 618<br>504   | -•280<br>-•308 | 081<br>168     | 096<br>126     |         |
| •150           | 312            | 323            | 341                   | 246              |         | 431          | 254            | 163            | 106            |         |
| •250           | 279            | <b>~.2</b> 29  | 238                   | 169              |         | 352          | 199            | 131            | 059            |         |
| • 350<br>• 450 | -•258<br>-•250 | 149            | 167                   | 102              |         | 318          | 179            | 101            | 033            |         |
| •550           | 179            | -•129<br>-•085 | 110<br>058            | 046<br>006       |         | 286<br>233   | 173<br>142     | 078<br>051     | -•004<br>•024  |         |
| •650           | 112            | 043            | 021                   | •022             |         | 172          | 090            | 018            | •049           |         |
| •750           | 066            | 012            | •003                  | •014             |         | 093          | 035            | •014           | •071           |         |
| 850            | -•007          | •041           | •042                  | •063             |         | 020          | •035           | •049           | •086           |         |
| •900           | •009           | •052           | •047                  | •062             |         | •013         | •051           | •049           | •075           |         |
|                |                |                | $b_v = 0$             | .66              |         |              |                | v = 0.93       | ·              |         |
|                |                |                |                       |                  | Left    | side         |                |                |                |         |
| •000           | •378           | •669           | •460                  | 160              |         | •315         | •689           | .154           | 350            |         |
| •025<br>•075   | •299<br>•134   | 139<br>176     | -1.228<br>737         | -1.174<br>-1.009 |         | e528         | •005           | -1.140         | 833            |         |
| •150           | •059           | -•176<br>-•183 | <b></b> 497           | -1.009<br>794    |         | •475<br>•386 | •056<br>•022   | -•766<br>-•633 | -•615<br>-•566 |         |
| •250           | •034           | 166            | - 363                 | 573              |         | 257          | 035            | 436            | 558            |         |
| ■350           | •020           | 166            | 328                   | 445              |         |              |                |                |                |         |
| • 450          | 003<br>019     | 177            | ~•308<br>- 343        | 360<br>300       |         |              |                |                |                |         |
| 4650           | 019            | 170<br>132     | 263<br>186            | 290<br>214       |         | 037          | 179            | 218            | 264            |         |
| •750           | •014           | 080            | 107                   | 147              |         | 046          | -•137          | 153            | 202            |         |
| •850           | •037           | 012            | 021                   | 090              |         | 016          | 058            | 071            | 145            |         |
| <b>♦900</b>    | •051           | •025           | •013                  | 051              |         | •007         | 012            | 027            | 120            |         |
|                |                |                |                       |                  | Right   | 'side        |                |                |                |         |
| ●025<br>●075   | -1.235         | 132            | •309                  | •529             |         | -1.104       | •072           | •539           | •697           |         |
| •150           | 761<br>422     | -•183<br>-•146 | •112<br>•057          | •313<br>•226     |         | 705          | •096           | •459           | •659           |         |
| •250           | 352            | 133            | •036                  | •180             |         | 614          | •093           | •410           | •605           |         |
| •350           | 331            | 126            | •014                  | •146             |         |              |                |                |                |         |
| • 450          | 285            | 126            | •006                  | •126             |         |              |                |                |                |         |
| •550           | 243            | 119            | 010                   | •108             |         |              |                |                |                |         |
| •650<br>•750   | -•173<br>-•092 | -•092<br>-•045 | •002<br>•017          | •096<br>•083     |         | 172<br>132   | 105<br>100     | •009<br>-•036  | •092<br>•014   |         |
| 850            | •009           | •038           | .062                  | •091             |         | 037          | 012            | •019           | •014           |         |
| •900           | •049           | .063           | •069                  | .078             |         | •003         | •026           | .026           | 006            |         |
| <u> </u>       | <del></del>    |                |                       |                  |         | <del></del>  |                |                |                |         |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORESONTAL TAIL. HORESONTAL TAIL IN THE LOW FOSTTION;  $i_t=0^\circ$  (a)  $\alpha=0^\circ$ ; M=0.60

|                  |                | -                     | Cp           | for-                  |                  |              |                | Cp for.       | <del></del>   |                      |
|------------------|----------------|-----------------------|--------------|-----------------------|------------------|--------------|----------------|---------------|---------------|----------------------|
| ¥                | B=-3.9°        | B=0°                  |              |                       | B=12.7°          | B=-3.9°      | B=0°           | B=3.9°        |               | B=12.7°              |
| x C <sub>v</sub> | /              | -                     | by = 0.1     |                       | 17-              | /            |                | $b_{V} = 0.3$ |               | _1/                  |
| ν                |                |                       | 00 - 0.7     | <u>'</u>              | 1 - 64 -         | ide          |                | - V - O - O   |               | ·····                |
|                  |                |                       |              |                       | Left s           | iae          |                |               |               |                      |
| •000             | <b>.</b> 607   | •665                  | .360         | 480                   | -1.371           | •306         | •748           | •335          | 433<br>-1.087 | -1.234<br>-1.186     |
| •025<br>•075     | •272<br>•131   | 098<br>109            | 532<br>371   | -1.152<br>695         | -2.378<br>-1.544 | ●332<br>●144 | -•091<br>-•128 | 624<br>428    | 960           | -1.154               |
| •150             | •038           | 137                   | 297          | 487                   | 671              | 052          | 139            | 318           | 714           | -1.105               |
| • 250            | •022           | 095                   | 201          | 308                   | 433              | 013          | 146            | 267           | 442           | -1.043               |
| • 350            | <b>-</b> ♦032  | 112                   | 175          | 245                   | 348              | 064          | 160            | 249           | 343           | 876                  |
| •450             | 064            | 123                   | 162          | <b>-</b> 208          | -•301            | 103<br>099   | 165<br>144     | 231<br>175    | 285<br>222    | 659<br>498           |
| •550<br>•650     | -•055<br>-•038 | 102<br>077            | 127<br>086   | 169<br>127            | -•318<br>-•248   | 078          | 107            | 120           | 159           | 375                  |
| 750              | 022            | 036                   | 040          | 092                   | 170              | 038          | 047            | 061           | 094           | 262                  |
| ●850             | •019           | •011                  | .008         | 034                   | 082              | •019         | •020           | .022          | 009           | 144                  |
| •900             | •0 <b>•</b> 0  | .045                  | •045         | •010                  | 034              | •050         | •057           | •052          | •033          | 087                  |
|                  |                |                       |              |                       | Right            | side         |                |               |               |                      |
| •025             | 460            | 029                   | •328         | •606                  | .830             | 631          | 063            | •379          | •604          | •740                 |
| •075             | 381            | 109                   | •130         | •353                  | •551<br>•270     | 427          | -•118<br>-•132 | 160           | •363<br>•223  | •535<br>•375         |
| •150<br>•250     | -•302<br>-•207 | -•125<br>-•100        | •052<br>•020 | •21 <b>2</b><br>•138  | •378<br>•271     | 325<br>261   | 132            | •064<br>•003  | •121          | •244                 |
| •350             | 180            | 107                   | 019          | •070                  | •172             | - 233        | 146            | ~.049         | •052          | 156                  |
| a 450            | 161            | 125                   | 061          | .017                  | •105             | 182          | 135            | 079           | 025           | •043                 |
| •550             | 119            | <b>-</b> •093         | 040          | •019                  | •087             | 175          | 132            | 079           | 018           | •045                 |
| •650             | 080            | 059                   | 021          | •026                  | •077             | 113          | 091            | 047<br>010    | 004           | •036<br>•036         |
| •750<br>•850     | -•034<br>•029  | <b>~</b> •022<br>•031 | •004<br>•050 | •045<br>•075          | •077<br>•091     | 050<br>.033  | -•033<br>•043  | -€010<br>•054 | •024<br>•066  | •054                 |
| 900              | •029           | •059                  | •059         | •073                  | •087             | •063         | •061           | •061          | •061          | •043                 |
|                  |                |                       | by = 0.      |                       |                  | 1            |                | ,=0.93        |               |                      |
|                  |                |                       |              |                       | Left             | s ide        |                | , 0.00        |               |                      |
| •000             | •216           | •720                  | .264         | 429                   | -•701            | •408         | •681           | •231          | 329           | 505                  |
| 025              | +350           | ~.123                 | 824          | -1.092                | 759              | 214          | 211            | 736           | 851           | - 537                |
| •075             | .154           | 144                   | 486          | 990                   | 740              | •031         | 162            | 382           | 837           | 549                  |
| •150             | •040           | 158                   | 364          | 804                   | 726              | 057          | 151            | 284           | 726           | 604                  |
| •250             | 032            | 165                   | 286          | 552                   | 694              | 103          | 162            | <b>-</b> •251 | 540           | <b>-</b> • 599       |
| •350<br>•450     | 085<br>117     | -•174<br>-•176        | 254<br>226   | -•377<br>-•292        | -•659<br>-•625   |              |                |               |               |                      |
| 550              | 108            | 151                   | 187          | 229                   | -•585            |              |                |               |               |                      |
| 650              | 085            | 116                   | 125          | 166                   | 528              | 103          | 091            | 120           | 347           | 410                  |
| •750             | 050            | 047                   | 056          | -•094                 | 465              | 071          | 038            | 079           | 329           | 382                  |
| •850             | *008           | •008                  | •002         | 032                   | 387              | 029          | 003            | 061           | 299           | 357                  |
| •900             | •029           | •029                  | •027         | 004                   | 359              | 008          | •017           | -:049         | ~•264         | 341                  |
|                  | la-            |                       |              |                       |                  | t side       |                |               |               |                      |
| •025             | 726            | 072                   | •392         | •597                  | •701             | 640          | 135            | •268<br>•031  | • 423         | •498<br>•24 <b>6</b> |
| ●075<br>●150     | 483<br>339     | -•135<br>-•137        | •151<br>•066 | •358<br>•216          | •491<br>•343     | 367<br>279   | 165<br>148     | 047           | •142<br>•005  | • 2 4 <b>6</b>       |
| •250             | 284            | ~•155                 | ~.012        | •098                  | 211              | 1            |                |               |               |                      |
| •350             | 258            | 169                   | 077          | .022                  | •112             |              |                |               |               |                      |
| • 450            | 221            | 162                   | 100          | 032                   | •040             |              |                |               |               |                      |
| •550             | 175            | 142                   | 102          | 053                   | •003             |              |                |               |               |                      |
| •650             | 117            | 100                   | 067          | 041                   | 015              | •031         | 001            | 042           | 055<br>074    | 080                  |
| •750<br>•850     | 052<br>-029    | 042<br>.036           | 031<br>.041  | <b>-</b> .006<br>.047 | -•027<br>-•024   | 080<br>022   | -•033<br>•015  | 054<br>003    | 032           | 121<br>124           |
| 900              | 056            | •054                  | •061         | •052                  | 057              | 008          | •031           | •011          | 027           | 147                  |
|                  |                | /                     |              |                       |                  | 1            |                |               |               |                      |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LCW POSITION;  $i_t = 0^\circ$  - Continued (b)  $\alpha = 0^\circ$ ; M = 0.80

|                | -              |                | Cp                   | for-           |                   |                | (              | Cp for                | -              |                       |
|----------------|----------------|----------------|----------------------|----------------|-------------------|----------------|----------------|-----------------------|----------------|-----------------------|
| <b> </b>       | B=-3.9         | B=0°           | B=39                 | B=7.90         | B=12.70           | B=-3.9°        | B=0°           | B=39°                 | B=7.9°         | B=12.70               |
| x C .          |                | 2/             | by = 0.1             | <i>'</i> /     |                   |                | Z/             | by = 0.               | 38             |                       |
| •              |                |                |                      | ·              | Left s            | ide            | <del></del>    |                       |                |                       |
|                |                |                | <del></del>          |                |                   | 1              |                |                       |                |                       |
| •000<br>•025   | •717<br>•281   | •677<br>-•055  | •545<br>-•527        | •183<br>-1•170 | 324<br>-1.565     | ●490<br>●335   | •781<br>-•070  | •545<br><b>-</b> •955 | •045<br>~1•686 | 586<br>-1.006         |
| •075           | •146           | 088            | 371                  | 909            | -1.284            | 152            | 117            | -449                  | -1.420         | -1.000                |
| •150           | •043           | 123            | 324                  | 529            | -1.007            | .055           | 132            | 344                   | 597            | 961                   |
| •250           | •017           | 090            | 214                  | 306            | 623               | 012            | 147            | 278                   | 400            | 877                   |
| •350           | -•024<br>-•072 | 109            | 187<br>173           | -•251<br>-•223 | 399<br>329        | 075            | 168            | 268                   | 344            | - • 774               |
| •450<br>•550   | 063            | -•126<br>-•102 | 133                  | 175            | 304               | -•121<br>-•109 | -•183<br>-•151 | -•246<br>-•185        | 292<br>219     | 656<br>543            |
| 650            | 047            | 072            | 092                  | 141            | 232               | 084            | 108            | 123                   | 149            | - +445                |
| •750           | 027            | 037            | 043                  | 098            | 188               | 035            | 036            | 054                   | 069            | 352                   |
| 850            | •016           | •026           | •022                 | 028            | 119               | •028           | •044           | •035                  | •019           | 249                   |
| •900           | •042           | •0 <b>6</b> 8  | •058                 | •016           | 067               | .068           | •088           | •071                  | •059           | 189                   |
|                |                |                |                      |                | Right             | side           |                |                       |                |                       |
| •025           | 415            | •017           | •338                 | •601           | .827              | 958            | 031            | .377                  | .604           | •751                  |
| •075           | 392            | 084            | •140                 | • 354          | +566              | 429            | 100            | •163                  | .364           | •541                  |
| •150<br>•250   | 310<br>210     | 109<br>085     | •059<br>•02 <b>4</b> | •271<br>•149   | •389<br>•287      | 331<br>268     | 117<br>133     | ∙065<br>-•004         | •227<br>•126   | •388<br>•2 <b>6</b> 2 |
| •350           | 187            | 108            | 025                  | •071           | •184              | 245            | 153            | 051                   | •050           | .174                  |
| • 450          | 167            | 120            | 065                  | .015           | ·105              | 190            | 138            | 089                   | 020            | .056                  |
| ●550           | 118            | 085            | 048                  | •015           | •086              | 17e            | 138            | 098                   | 031            | •034                  |
| •650<br>•750   | -•070<br>-•024 | 046            | 022<br>002           | •027           | •074              | 106<br>026     | ~•088<br>~•008 | 063<br>011            | ~.014          | 022                   |
| 850            | •037           | 010<br>.050    | •042                 | •036<br>•065   | •063<br>•074      | •059           | •068           | •059                  | •018<br>•068   | •017<br>•027          |
| 900            | 068            | •077           | 058                  | •073           | •060              | 083            | 4089           | •077                  | •077           | •008                  |
|                |                | Z/             | 'by = 0.             | 66             |                   | <u> </u>       | Z/b            | y = 0.93              |                |                       |
|                |                |                |                      |                | Left              | s ide          |                |                       |                |                       |
| •000           | •427           | •751           | .477                 | •004           | 431               | •502           | •710           | 390                   | •015           | 333                   |
| .025           | e345           | 108            | -1.091               | -1.194         | 702               | •209           | 228            | -14010                | 707            | 476                   |
| •075           | •161           | 142            | 567                  | -1.120         | 702               | •008           | 183            | 581                   | 701            | 490                   |
| •150<br>•250   | 040            | 163<br>171     | 399<br>312           | -•959<br>-•778 | <b>699</b><br>669 | 076            | 159<br>168     | -+294<br>-+248        | -+701<br>(17   | 542                   |
| • 350          | 099            | 184            | 271                  | 581            | 630               | 124            | -1100          | - 4240                | 617            | 546                   |
| • 450          | 133            | 189            | 239                  | - 399          | 588               |                |                |                       |                |                       |
| •550           | 132            | 162            | 193                  | 262            | 543               | 1              |                |                       |                |                       |
| •650           | -•095          | 109            | 121                  | 156            | 499               | 093            | 067            | 118                   | 358            | -,388                 |
| •750<br>•850   | -•038<br>•019  | 019<br>.038    | 045<br>.024          | 072<br>008     | ~•448<br>-•398    | -•053<br>-•003 | ~•007<br>•038  | -•069<br>-•046        | 310            | 369<br>339            |
| 900            | 042            | •067           | .051                 | •021           | 373               | •011           | •061           | 030                   | 274<br>237     | - 324                 |
|                |                |                |                      |                | Right             | <del></del>    |                |                       |                |                       |
| •025           | -1.060         | 040            | •389                 | •598           | •719              | -,969          | 135            | •254                  | •419           | •530                  |
| •075           | 503            | 120            | .164                 | • 360          | .518              | 461            | 180            | 004                   | <b>•128</b>    | •2 <b>67</b>          |
| 150            | 353            | 123            | •064                 | •222           | • 365             | -•271          | -•154          | 080                   | 008            | •097                  |
| • 250<br>• 350 | 302<br>268     | -•151<br>-•178 | 033<br>091           | •102<br>•010   | •226<br>•115      | 1              |                |                       |                |                       |
| •450           | 227            | -•171          | 124                  | 045            | •037              | 1              |                |                       |                |                       |
| ●550           | -•178          | 141            | 121                  | 065            | 016               |                |                |                       |                |                       |
| •650           | 106            | 088            | 080                  | 048            | 036               | •013           | •007           | ~+040                 | 055            | 087                   |
| •750<br>•850   | 033            | 020            | -•033                | 017            | 053               | 055            | 008            | 051                   | 068            | 133                   |
| 900            | •054<br>•091   | •070<br>•100   | •058<br>•083         | ∙050<br>•064   | -•041<br>-•079    | •005<br>•016   | •061<br>•076   | •016<br>•029          | -•020<br>-•023 | 122<br>145            |
| .,,,,,         |                | •100           | •000                 | • 004          |                   | .016           | •010           | 8067                  | #025           | - 6 1 4 5             |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_t$  = 0° - Continued (e)  $\alpha$  = 0°; M = 0.85

|                   |                |                | $C_{P}$        | for-           |                |                |               | Cp for            | -              |            |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-------------------|----------------|------------|
| Х                 | B=-3.99        | B=0°           | B=3.9°         | B=7.90         | B=12.7°        | B=-3.90        | B=0°          | B=39°             | B=7.9°         | B=127      |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1       | 1              | ·····          | Í .            | Z             | by = 0.           | 38             | 1/         |
|                   |                |                |                | ·              | Left s         | ide            | ····          |                   |                |            |
| •000              | •742           | •680           | •587           | • 301          | 144<br>-1.341  | •537           | •787          | •600              | •187           | 403        |
| •025<br>•075      | •280<br>•142   | 059<br>095     | 528<br>384     | -1.095         |                | • 326          | 079           | -1.088            | -1.559         | 914        |
| •150              | 043            | -145           | 351            | 874<br>670     | -1.153<br>973  | ●144<br>●050   | 136           | 426               | -1.395         | 937        |
| • 250             | 017            | 109            | 228            | 336            | 716            | 026            | 155<br>169    | -•356<br>-•304    | -1.209         | 930        |
| • 350             | 036            | 131            | 198            | 255            | 516            | 090            | 194           | -•30 <del>4</del> | -•336<br>-•293 | 858<br>757 |
| · 450             | 090            | 152            | 189            | 211            | 407            | 146            | 209           | 267               | 271            | - 648      |
| •550              | 074            | 122            | 142            | 159            | 338            | ~.131          | 179           | - 192             | 211            | - 556      |
| •650              | 063            | 089            | 101            | 134            | -+256          | 106            | 132           | 131               | 142            | - 470      |
| • 750             | -4040          | 051            | 046            | 088            | ~•216          | 046            | 048           | 053               | 064            | - 380      |
| ·850              | •007           | •012           | •018           | <b>-</b> •015  | 134            | •030           | •032          | •034              | •029           | 276        |
| • 900             | •039           | •055           | •058           | •030           | 076            | ●067           | •076          | •076              | •069           | 217        |
|                   |                |                |                |                | Right          | side           |               |                   |                |            |
| •025<br>•075      | -•388<br>-•397 | •012<br>-•097  | •338<br>•141   | •608<br>•359   | .833<br>.563   | 986            | 049           | •371<br>•159      | •598           | •750       |
| • 150             | 328            | 129            | 054            | 223            | .399<br>.399   | 436            | 124           | •058              | •360           | •543       |
| . 250             | 226            | 108            | •015           | 4155           | •290           | 354<br>288     | 139<br>156    | ~.012             | •227<br>•125   | 386<br>272 |
| • 350             | 200            | 128            | 046            | 272            | 187            | ~.2 <b>6</b> 8 | 175           | 069               | ●145<br>●046   | 169        |
| • 450             | 184            | 142            | 078            | .006           | .103           | 204            | 165           | 103               | 025            | 4056       |
| • 550             | 127            | 106            | 066            | •003           | •079           | 184            | 166           | 116               | ~.042          | 029        |
| •650              | 080            | 064            | 038            | •025           | •072           | 116            | 108           | 079               | 029            | 1007       |
| • 750             | 027            | <b></b> 029    | 019            | •033           | • 054          | 030            | 027           | 019               | •009           | •009       |
| ∙850<br>•900      | •037<br>•070   | •039           | •038           | •068           | •064           | +056           | •062          | •054              | •069           | .014       |
| 1900              | •070           | •062           | •056           | •06B           | •050           | •089           | •079          | ●078              | •079           | 016        |
|                   |                |                | $b_{V} = 0.$   | 66             |                |                | Z/b           | v =0.93           |                |            |
|                   |                |                |                |                | Left           | s ide          |               |                   |                |            |
| •000              | •470           | • 757          | •533           | •125           | <b>-</b> •331  | ●522           | •711          | •435              | .010           | 306        |
| •025              | ●336           | 114            |                | -1.641         | 746            | •187           | 262           | -1:089            | 975            | 504        |
| •075              | •154           | -•15B          |                | -1.473         | <b>758</b>     | 024            | -•21B         | <b>6</b> 78       | 907            | 530        |
| •150<br>•250      | •033<br>-•057  | 188            |                | -1.291         | <b>~•758</b>   | 106            | 188           | 310               | 865            | 593        |
| • 350             | 121            | -•198<br>-•216 | ~•321<br>-•278 | -•500<br>-•355 | 700            | 141            | 201           | 261               | 706            | 581        |
| • 450             | 161            | -•221          | 254            | -•285          | 666<br>620     |                |               |                   |                |            |
| •550              | 154            | 186            | 199            | 199            | ~•570          |                |               |                   |                |            |
| •650              | 108            | 132            | 128            | 122            | 514            | 108            | 082           | 128               | 396            | 414        |
| • 750             | 043            | 028            | 045            | 051            | 450            | 050            | 022           | 078               | 350            | - 393      |
| 850               | •020           | •028           | •030           | .020           | 387            | 006            | 029           | 053               | 301            | 366        |
| •900              | •047           | •060           | •058           | •042           | 366            | •013           | •053          | -•032             | 262            | 350        |
|                   |                |                |                |                | Right          | side           |               |                   |                |            |
| •025<br>•075      |                | 058            | 382            | •588           | •717           | -1.138         | 164           | •245              | •423           | •530       |
| •150              |                | -•144<br>-•148 | •154<br>•057   | •360<br>•217   | •516           | 490            | 218           | 032               | •119           | •267       |
| • 250             | l .            | -•179          | 043            | ●217<br>●095   | • 364<br>• 226 | -•270          | <b>~•</b> 189 | 106               | 041            | •086       |
| • 350             |                | -•213          | 108            | •000           | •107           |                |               |                   |                |            |
| ·450              |                | 204            | 151            | 062            | 023            |                |               |                   |                |            |
| •550              |                | 174            | 138            | 084            | 034            |                |               |                   |                |            |
| •650              |                | 105            | 093            | 055            | 051            | 038            | 049           | 055               | 075            | 109        |
| • 750             |                | -•032          | 042            | <b>-</b> •025  | 064            | 060            | 019           | 049               | 068            | 153        |
| ∙850<br>•900      | ●059<br>●096   | •059           | •060<br>•081   | •055           | 053<br>084     | •003           | •050          | .018              | 018            | 133        |
|                   |                | •092           |                | •072           |                | •020           | •072          |                   |                |            |

TABLE VI.- PRESSURE GOEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_t=0^\circ$  - Continued (d)  $\alpha=0^\circ$ ; M = 0.90

|                  |               |                   | Cp                                      | for-           |                 |                |                | Cp for         | _             | <del></del>                           |
|------------------|---------------|-------------------|---|----------------|-----------------|----------------|----------------|----------------|---------------|---------------------------------------|
| X                | B=-3.9        | B=0°              | B=3.9                                   | B=7.9          | B=12.70         | B=-3.9°        | B=0°           | B=39°          |               | B=12.7°                               |
| x C <sub>V</sub> |               | Z/                | by = 0.                                 | //             |                 | <u> </u>       | Z              | /by = 0.       | 1/-           | , , , , , , , , , , , , , , , , , , , |
|                  |               | <del></del>       |   |                | Left s          | ide            |                | 20-0.          |               |                                       |
| •000             | •773          | •689              | •639                                    | •409           | •008            | •595           | •801           | :661           | •321          | 228                                   |
| •025             | •291          | -•048             | 468                                     | 993            | -1.187          | •328           | -•075          | 993            | -1.337        | 802                                   |
| •075<br>•150     | •154          | 089<br>141        | 377<br>355                              | 782<br>660     | -1:027<br>-:882 | •154<br>•052   | 137<br>157     | 556            | -1.213        | - 6815                                |
| 250              | •024          | 109               | 227                                     | 489            | -•691           | 022            | 172            | -•359<br>-•307 | -1.104<br>620 | 833<br>799                            |
| •350             | 034           | 136               | 206                                     | 327            | 557             | 096            | 210            | 325            | 431           | - 722                                 |
| • 450            | 099           | 163               | 196                                     | 262            | 474             | 160            | 231            | 264            | 268           | 636                                   |
| •550             | 084           | 128               | 136                                     | 165            | 390             | 154            | 195            | 188            | 154           | 549                                   |
| •650             | 073           | 097               | 089                                     | 124            | 317             | 124            | 141            | 119            | 106           | - 479                                 |
| •750             | 049           | 052               | 033                                     | 078            | 272             | 058            | 043            | 039            | 042           | - 408                                 |
| •850<br>•900     | •005<br>•038  | ∙019<br>•058      | •039<br>•071                            | 006<br>.034    | -•178<br>-•114  | •032<br>•071   | •043<br>•086   | •050<br>•092   | •041<br>•083  | 324<br>265                            |
| 1,700            | •038          | 1038              | • | 8034           | Right           | side           | *000           | 1072           | •003          | - 6 2 6 7                             |
| .025             | 339           | •030              | •348                                    | ø <b>6</b> 05  | •837            | 935            | 036            | •368           | 4588          | .756                                  |
| •075             | 411           | 085               | .158                                    | •362           | •572            | 606            | 117            | .166           | .357          | .542                                  |
| 150              | -•356         | 120               | •062                                    | •228           | •407            | 375            | 140            | •062           | .226          | •390                                  |
| • 250            | 240           | 105               | •024                                    | •151           | •296            | 304            | 163            | 010            | ·123          | • 2 <b>6</b> 8                        |
| •350             | 214           | 129               | 036                                     | •067           | •190            | 296            | 194            | 071            | •035          | •171                                  |
| •450<br>•550     | 197<br>125    | 155<br>112        | 085<br>068                              | -•005<br>-•005 | •099<br>•079    | 215<br>186     | -•182<br>-•172 | 117<br>128     | 044<br>064    | •060<br>•017                          |
| •650             | 073           | 070               | 036                                     | •013           | •070            | 109            | 113            | 089            | 048           | 001                                   |
| .750             | 022           | 031               | 016                                     | •021           | •045            | 019            | 021            | 020            | 002           | 008                                   |
| ●850             | •048          | .043              | .039                                    | •059           | •043            | •069           | +065           | .060           | •059          | 005                                   |
| •900             | •076          | •069              | •058                                    | • 067          | .020            | •100           | •092           | •082           | •078          | 035                                   |
|                  |               | Z/                | $b_{\nu} = 0$                           | .66            |                 |                | Z/b            | v = 0.93       |               |                                       |
|                  |               |                   |   |                | Left            | s ide          |                |                |               |                                       |
| •000             | •526          | .769              | •597                                    | • 253          | 197             | •556           | •722           | •495           | •142          | 230                                   |
| •025             | •335          | 113               | -1.116                                  | -1.417         | 750             | .186           | 287            | -1.079         | -1.333        | 521                                   |
| •075             | •150          | 163               | 908                                     | -1.278         | 764             | 042            | 260            | -1.047         | -1.341        | 536                                   |
| •150             | •032          | 199               | 383                                     | -1.202         | 766             | 170            | 210            | 343            | -1.084        | 589                                   |
| •250             | 065           | 219<br>249        | 393<br>239                              | -1.112         | 671             | 162            | -•225          | -•191          | 710           | 580                                   |
| •450             | 189           | 246               | 239                                     | 666<br>162     | 640<br>613      |                |                |                |               |                                       |
| •550             | 181           | -•2 <del>46</del> | 195                                     | 098            | 580             |                |                |                |               |                                       |
| •650             | 127           | 137               | -,115                                   | 065            | 538             | 113            | 078            | 117            | 323           | 439                                   |
| •750             | 060           | 025               | 029                                     | 017            | 481             | 032            | 011            | 055            | 305           | 414                                   |
| ●850             | •033          | •034              | •042                                    | •038           | 415             | .013           | .043           | 037            | 277           | 386                                   |
| •900             | •052          | •067              | •074                                    | •057           | -•387           | •029           | •063           | 021            | 240           | 374                                   |
|                  |               |                   |   |                | Right           |                |                |                |               |                                       |
| •025<br>•075     | -1.077<br>857 | 048<br>147        | •377<br>•158                            | •576<br>•342   | •717<br>•517    | -1.068         | 167<br>262     | e238           | ·410          | 535                                   |
| •150             | -4346         | 152               | •054                                    | 209            | •369            | -•990<br>-•245 | 211            | -•060<br>-•172 | •099<br>-•085 | •273<br>•082                          |
| 250              | 378           | 195               | 047                                     | •079           | •229            | - 66 47        | • • • • •      | - 9 4 7 4      | •005          | •002                                  |
| •350             | 244           | 233               | 127                                     | 019            | 112             |                |                |                |               | 1                                     |
| •450             | 237           | 227               | 172                                     | 105            | •017            |                |                |                |               |                                       |
| •550             | 189           | 187               | 158                                     | 124            | -4047           |                | _              |                |               | ľ                                     |
| •650             | ~105          | 110               | 103                                     | 082            | -•071           | 060            | 062            | 049            | 077           | 126                                   |
| 1750             | 027           | 025               | 036                                     | -•034          | 084             | 054            | 012            | 043            | 074           | 173                                   |
| •850<br>•900     | ●075<br>●109  | •075<br>•108      | •064<br>•090                            | .054<br>.075   | 062<br>094      | •010<br>•021   | •063<br>•080   | •03 <b>6</b>   | 011<br>009    | 143                                   |
| . 700            | 1107          | 1100              | 1070                                    | •015           | -1074           | \$UZ1          | *000           | •047           | -1009         | 165                                   |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_t = 0^\circ$  - Continued (e)  $\alpha = 0^\circ$ ; M = 0.92

|                  | T              |                      | Cp           | for-                  |               | T              |                | <u> </u>                                |                      |                |
|------------------|----------------|----------------------|--------------|-----------------------|---------------|----------------|----------------|---|----------------------|----------------|
|                  | 0- 20          | 94 B=0°              |              |                       | -1 4          |                | T &            | Cp for                                  |                      |                |
| \\ \frac{x}{C_V} | 15 = -3.5      |                      |              | 3° B=7.9              | · B=12.70     | B=-3.9°        | B =0°          | B=3.9°                                  | B=7.9°               | B=127°         |
| $c_{v}$          |                | z,                   | 16 v = C     | 0.//                  |               |                | Z              | 1by = 0.                                | <i>38</i>            | ••             |
|                  | Ĺ              |                      |              |                       | Left s        | ide            |                |   |                      |                |
| •000             | •778           | •692                 | •656         | • 446                 | •066          | •621<br>•322   | •799           | •677                                    | •365                 | 168            |
| ●025<br>●075     | •289<br>•155   | 041<br>085           | 449<br>378   | 953                   | -1.170        |                | 073            |   | -1.269               | <b>77</b> 2    |
| 150              | •047           | ~.143                | 358          | -•751<br>-•639        | -1.003<br>855 | ●149<br>●049   | 141<br>162     |   | -1 • 156<br>-1 • 058 | 781<br>802     |
| .250             | •020           | 111                  | 243          | 542                   | 666           | 027            | 183            | 314                                     | 671                  | 775            |
| •350             | 039            | 142                  | 218          | 370                   | <b>-</b> ∗556 | 105            | 226            | 341                                     | 508                  | 718            |
| • 450            | 107            | 180                  | 219          | 315                   | ~•498         | 174            | 264            | 331                                     | 424                  | 642            |
| •550<br>•650     | -•093<br>-•084 | -•143<br>-•112       | 151<br>097   | 203<br>130            | 416           | 177            | 219            | 182                                     | 159                  | 570            |
| 750              | 057            | 061                  | 032          | 073                   | 356<br>311    | 140<br>065     | -•159<br>-•041 | 122<br>036                              | 081<br>020           | 508<br>437     |
| 850              | 000            | •015                 | •036         | 001                   | 216           | •030           | •038           | •052                                    | •057                 | - 356          |
| • 900            | ●035           | •061                 | .068         | .044                  | 150           | •075           | .087           | €096                                    | .096                 | 302            |
|                  |                |                      |              |                       | Right         | side           | <del></del>    |   |                      |                |
| •025             | 319            | •034                 | •347         | •612                  | .845          | 873            | -•036          | •363                                    | •590                 | 759            |
| •075<br>•150     | 400<br>369     | -•085<br>-•125       | •154<br>•062 | • 368<br>• 233        | •576<br>•410  | ~•635<br>~•408 | 128<br>146     | •158<br>•056                            | •360<br>•227         | •549<br>•395   |
| •250             | 255            | -•125<br>-•115       | •020         | 157                   | 299           | 306            | 170            | 020                                     | 119                  | 272            |
| • 350            | 229            | 141                  | 045          | .064                  | •189          | 322            | 210            | 081                                     | .036                 | 169            |
| • 450            | 209            | 171                  | 098          | 010                   | •098          | 258            | 215            | 137                                     | 051                  | .060           |
| •550             | 137            | 129                  | 082          | 013                   | •077          | 177            | 200            | 152                                     | 079                  | •015           |
| •650<br>•750     | 072<br>023     | 078<br>036           | 051<br>032   | •006<br>•014          | •064          | 102            | 125<br>022     | 103<br>032                              | 060                  | 014<br>021     |
| 850              | •050           | •041                 | •036         | •058                  | ●036<br>●027  | 017<br>.072    | •066           | •052<br>•052                            | 010<br>.061          | 021            |
| 900              | •083           | •070                 | .052         | •066                  | 007           | 104            | .091           | •081                                    | •078                 | 058            |
|                  |                | Z                    | by = C       | 0.66                  |               |                | Z/b            | v = 0.93                                |                      |                |
|                  |                |                      |              |                       | Left          | side           | <u>-</u>       |   |                      |                |
| .000             | +546           | •770                 | •622         | •301                  | 138           | •576           | •721           | •514                                    | •198                 | -•200          |
| ●025             | •326           | 113                  | -1.077       | -1.345                | 726           | •173           | 285            | -1.047 -                                | -1.303               | 519            |
| •075             | +148           | 170                  | 892          | -1.213                | 731           | 054            | 302            |   | -1.309               | 537            |
| ●150<br>●250     | •025'<br>-•071 | -•209<br>-•239       | 516<br>394   | -1.150<br>-1.095      | 739<br>689    | 205            | 248            |   | -1+092               | 582            |
| •350             | 161            | 294                  | 391          | -1.095<br>985         | 654           | 224            | 253            | 161                                     | 964                  | 581            |
| .450             | 226            | 279                  | 198          | 398                   | 609           |                |                |   |                      |                |
| ♦550             | 203            | 234                  | 193          | 056                   | 579           |                |                |   |                      | I              |
| •650             | 140            | 142                  | 116          | 020                   | <b>~•</b> 550 | 098            | 081            | 119                                     | 342                  | 451            |
| ●750<br>●850     | -•051<br>•037  | -•028<br>•037        | 034<br>.041  | •014<br>•058          | 495<br>436    | 033<br>.008    | 011<br>.041    | 064<br>040                              | 307<br>273           | - 432<br>- 405 |
| 900              | •054           | •072                 | •074         | 079                   | 414           | •028           | •064           | 024                                     | 236                  | 392            |
|                  |                |                      |              |                       | Right         |                |                |   |                      |                |
| •025             | -1.017         | 054                  | •367         | 574                   | 720           | -1999          | 175            | •227                                    | •411                 | .544           |
| •075             | 830            | 154                  | 149          | • 346                 | •515          | <b></b> 971    | 320            | 072                                     | 105                  | •274           |
| •150             | 441            | 164                  | •045         | ·215                  | •372          | 597            | 248            | 204                                     | 085                  | •081           |
| •250<br>•350     | -•386<br>-•390 | -•219<br>-•285       | 061<br>152   | •080<br><b>-</b> •028 | •229<br>•107  |                |                |   |                      | - 1            |
| 450              | <b></b> 196    | -•257                | 204          | 119                   | •005          |                |                |   |                      | i              |
| •550             | 180            | 209                  | 182          | 147                   | 062           |                |                |   |                      | i              |
| ●650             | 099            | 116                  | 120          | - 099                 | 083           | 091            | 077            | 068                                     | 074                  | 149            |
| 750              | 021            | ~•030                | 043          | 040                   | 102           | 059            | 014            | 048                                     | 062                  | 188            |
| •850<br>•900     | •080<br>•110   | ●078<br>●1 <b>04</b> | •065<br>•091 | .058<br>.084          | 074<br>111    | •009<br>•021   | •063<br>•075   | •031<br>•047                            | •000<br>•006         | 158<br>175     |
|                  |                | 1107                 | •071         | 0007                  | • 1 1 1       | 1021           | .012           | • | • 000                | 117            |

Table VI.- Pressure coefficients for the combination of the Wing, fugelage, vertical tail, and horizontal tail. Euresontal tail in the 10 v position;  $i_t = 0^\circ$  - Continued

(f)  $\alpha = 9.4^{\circ}$ ; M = 0.60

|  |                |                | Cp             | for-         |                | T            |                | Cp for         | <u> </u>         |                       |
|--|----------------|----------------|----------------|--------------|----------------|--------------|----------------|----------------|------------------|-----------------------|
| ע                                      | B=-3.          | 94 8=0         |                | 9º B=7       | 9° B=12.7°     | R= 39        | B=0°           | B=39           |                  | 9° B=127°             |
| <del>X</del> <del>C</del> <sub>v</sub> | 170            |                | 10 v = C       |              | J 12.1         | D 5.5        | Z              |                |                  | 9°   B=12.1°          |
| - V                                    |                | ···            | 70V - C        | 7.77         |                | <u> </u>     |                | 16v = 0        | .30              |                       |
|  | 1              |                |                |              | Left s         | s ide        |                |                |                  |                       |
| •000                                   | 404            | •799           | •443           | 682          | -1.174         | •155         | .683           | .157           | 727              | -1.512                |
| ●025<br>●075                           | 027<br>.016    | -•136<br>-•133 | 234<br>318     | 727<br>550   | -2.628<br>863  | •336<br>•150 | -•108<br>-•145 | -•727<br>-•475 | -1.225<br>-1.032 | -1.336                |
| 150                                    | 022            | 156            | 313            | 457          | 658            | •055         | 154            | 352            | -10032<br>-0777  | -1 • 292<br>-1 • 372  |
| •250                                   | 018            | 113            | 229            | 332          | 429            | 011          | 165            | 291            | -+466            | -1 • 192              |
| •350                                   | 047            | 124            | 209            | 282          | 361            | 067          | 181            | 282            | 347              | 801                   |
| •450<br>•550                           | -•070<br>-•079 | 142            | 202            | 254          | 361            | 102          | -•204          | ~•259          | 302              | 464                   |
| •650                                   | 058            | -•133<br>-•111 | 184<br>150     | 222<br>191   | 295<br>235     | 104          | 165<br>129     | 209<br>161     | 241              | 333                   |
| 750                                    | 047            | -•079          | 109            | 125          | 178            | 054          | -•129<br>-•083 | 093            | 191<br>118       | 285<br>208            |
| ●850                                   | 013            | 031            | 050            | 072          | 105            | •005         | 013            | 018            | 032              | 114                   |
| •900                                   | •012           | •005           | 007            | 027          | 057            | €030         | •016           | •018           | •009             | 066                   |
|  |                |                |                |              | Right          | side         |                |                |                  |                       |
| •025                                   | 181            | 054            | •005           | 498          | .813           | 698          | 072            | •375           | •580             | •708                  |
| ●075<br>●150                           | - 333          | 142<br>142     | •018<br>-•004  | •316<br>•212 | • 54B          | 464          | 129            | •16B           | • 366            | •543                  |
| •250                                   | -•315<br>-•238 | 106            | 022            | •155         | .388<br>.285   | 351<br>287   | -•142<br>-•154 | •071<br>•005   | •232<br>•132     | •388<br>•2 <b>6</b> 9 |
| •350                                   | - 224          | 122            | 047            | •0B2         | .194           | - 269        | 165            | 047            | •068             | •183                  |
| · 450                                  | 215            | 138            | 066            | .028         | •107           | 244          | 183            | 084            | •007             | •103                  |
| <b>♦550</b>                            | 174            | 117            | 057            | •012         | •080           | 208          | 163            | 088            | 020              | •055                  |
| •650                                   | 142            | 090            | 041            | •012         | •071           | 147          | ~.120          | 066            | 020              | •039                  |
| •750<br>•850                           | 102<br>031     | -•065<br>-•009 | 022<br>.021    | •012<br>•048 | •050<br>•073   | 081          | 061<br>.007    | -•032<br>•028  | •003             | •036                  |
| 900                                    | .003           | •019           | •039           | •053         | •071           | .028         | .023           | •032           | •055<br>•041     | .059<br>.043          |
|  |                |                | 1/by = 0       |              |                |              |                | ν =0.93        |                  | 40.15                 |
|  | <b>!</b>       |                |                |              | Left           | side         | - <del></del>  | ,              |                  |                       |
| .000                                   | •032           | •626           | •009           | 795          | -1.123         | 182          | •570           | 043            | 463              | 854                   |
| ●025                                   | •336           | 142            | -1.022         | -1.325       | 909            | •209         | 215            | 888            | 727              | 612                   |
| •075                                   | •157           | <b>17</b> 2    | 543            | -1+297       | 895            | •007         | 201            | 482            | 709              | 601                   |
| •150                                   | •041           | 188            | 402            | -1.193       | 863            | 092          | 188            | 309            | 672              | 610                   |
| •250<br>•350                           | 033<br>088     | 185<br>197     | ~•318<br>-•284 | 802<br>382   | -•827<br>-•797 | 077          | 126            | 222            | 575              | 598                   |
| • 450                                  | 115            | -•197<br>-•199 | 254            | 254          | -•749          |              |                |                |                  |                       |
| •550                                   | 131            | 190            | 213            | 220          | -•676          | ]            |                |                |                  |                       |
| •650                                   | -•099          | 142            | 152            | 168          | 591            | 115          | -•099          | 143            | 368              | 480                   |
| • 750                                  | 056            | 088            | 088            | 100          | <b>~•50</b> 2  | 079          | 054            | 111            | 329              | -:450                 |
| ●850<br>●900                           | 018<br>.003    | -+024<br>-+006 | 027<br>004     | 043          | 397            | 047          | 015            | 082            | 284              | 429                   |
| 700                                    | •003           | -4006          | 004            | 016          | -•356<br>Right | 024          | •005           | 063            | 259              | 413                   |
| .025                                   | 931            | 083            | <b>4382</b>    | • 566        |                | <i>side</i>  | 149            | •246           | . 271            | 445                   |
| 075                                    | 519            | 147            | 1164           | • 350        | • <b>49</b> 8  | 437          | 201            | 004            | •371<br>•109     | •445<br>•230          |
| •150                                   | 360            | 151            | •062           | .223         | •354           | 276          | 172            | 091            | 016              | 073                   |
| • 250                                  | 312            | 174            | 018            | •107         | e235           |              |                |                |                  |                       |
| •350<br>•450                           | 281<br>247     | 188<br>190     | 079<br>109     | ±025         | •132<br>•050   |              |                |                |                  |                       |
| 550                                    | 204            | 172            | 109<br>116     | 025<br>050   | .059<br>.016   |              |                |                |                  |                       |
| •650                                   | -+147          | 138            | 084            | 043          | 012            | 117          | 088            | 111            | 127              | 149                   |
| •750                                   | 079            | 056            | 043            | 022          | 021            | 092          | 061            | 086            | 118              | - 167                 |
| ∙850                                   | •003           | •007           | .023           | .025         | 018            | 036          | •005           | 027            | 077              | 167                   |
| •900                                   | •028           | •025           | •043           | •039         | 037            | 022          | •016           | 013            | 077              | 190                   |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERSICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_{\rm t}$  = 0° - Continued

|  | $9.6^{\circ}; M = 0.80$ | 9.6°: | <b>α</b> = | (g) |
|--|-------------------------|-------|------------|-----|
|--|-------------------------|-------|------------|-----|

|                          |                |                | Cp          | for-           |                |                |                                | Cp for         | <del></del> - |              |
|--------------------------|----------------|----------------|-------------|----------------|----------------|----------------|--------------------------------|----------------|---------------|--------------|
| <u>x</u> _C <sub>v</sub> | B=-3.9         | \$=0°          | B=3.9       | · B=7.9°       | B=12.70        | B=-3.9°        | B=0°                           | B=3.9°         | B=7.9°        | B=127°       |
| c <sub>v</sub>           |                | Z/             | by = 0.     | //             |                |                | Z/                             | by = 0.3       | 38            |              |
|                          |                |                |             |                | Left s         | ide            |                                |                |               |              |
| • 000                    | •355           | •853           | •427        | 364            | 157            | •405           | •724                           | +442           | 136           | 807          |
| •025<br>•075             | -•048<br>•017  | -•110<br>-•128 | 142         | 590            | -1.622         | •324           | -•097                          | 955            | -1.493        | -1.070       |
| 150                      | 016            | 162            | 313<br>352  | 566            | -1.094         | •148           | 142                            | - 496          | -1.149        | -1.047       |
| • 250                    | 022            | 107            | ~.246       | 533<br>372     | -•702<br>- •70 | •054           | 151                            | 370            | 816           | -1.006       |
| • 350                    | 055            | 122            | 225         | 305            | 478<br>397     | 013<br>078     | 165                            | ~•310          | 469           | 951          |
| 450                      | 078            | 157            | 223         | 275            | -•361          | 134            | -•19 <b>5</b><br>-•21 <b>6</b> | 299<br>276     | 386<br>340    | 811          |
| •550                     | 084            | 141            | 195         | 239            | ~4329          | -125           | 185                            | 222            | 275           | 639<br>505   |
| •650                     | 067            | 118            | 158         | 205            | 289            | 108            | 147                            | 167            | 205           | -415         |
| •750                     | 054            | 087            | 119         | 154            | 256            | 064            | 081                            | 093            | 128           | 339          |
| 850                      | 013            | 02B            | 049         | 076            | 177            | •004           | 001                            | 005            | 030           | - 233        |
| •900                     | •017           | •011           | 004         | 031            | ~.120          | •040           | •042                           | •042           | .017          | 166          |
|                          |                |                |             |                | Right          | side           |                                |                |               |              |
| •025                     | 099            | 019            | 019         | •393           | •779           | -1.080         | -•04B                          | •380           | •589          | •717         |
| •075<br>•150             | -4334          | <b>-</b> ∙130  | •031        | •311           | •530           | 467            | 121                            | 172            | • 366         | 536          |
| 250                      | -+346<br>-+260 | 147            | •010        | .224           | •381           | 367            | 130                            | ■077           | • 240         | •394         |
| 350                      | 242            | -•104<br>-•121 | 011<br>043  | •161           | •280           | 304            | ~•150                          | •008           | •143          | • 269        |
| •450                     | 231            | -•148          | <b>04</b> 3 | •081<br>•019   | •180           | 287            | 171                            | 045            | •066          | •181         |
| •550                     | 190            | 125            | 057         | 001            | ∙096<br>•069   | -•264<br>-•217 | 183                            | 089            | 004           | •091         |
| •650                     | 148            | 095            | 039         | •007           | •055           | 155            | 168<br>125                     | 105<br>075     | 037           | •041         |
| •750                     | 110            | 065            | 022         | •007           | •032           | 075            | 056                            | -•028          | 031           | •021         |
| ●850                     | 030            | 001            | .024        | •042           | •044           | 013            | •028                           | •039           | 007<br>.042   | •011<br>•027 |
| •900                     | 4004           | •025           | •042        | .049           | .034           | •039           | .048                           | 051            | •045          | ~•001        |
|                          |                | 2/             | by = 0      | .66            |                |                | Z/b                            | v = 0.93       |               |              |
|                          |                |                |             |                | Left           | side           |                                |                |               |              |
| •000                     | •284           | •659           | •296        | 252            | 723            | •314           | •603                           | •170           | 236           | 659          |
| 025                      | •331           | 138            | -1.183      | -1.104         | 729            | 193            | 251                            | 898            | 667           | 551          |
| •075                     | •154           | 165            | 642         | -1.052         | <b>-•723</b>   | 020            | 230                            | 684            | ~.645         | - 543        |
| •150<br>•350             | •042           | 180            | 431         | -1.007         | 708            | 136            | 195                            | 363            | 657           | 546          |
| •250<br>•350             | -•043          | 191            | 328         | 911            | 685            | ~•098          | 121                            | 246            | 604           | 556          |
| 450                      | -•104<br>-•145 | -•209<br>-•216 | 289         | 710            | 665            | 1              |                                |                |               |              |
| •550                     | ~.157          | -•216<br>-•194 | 261<br>219  | -•480<br>-•322 | ~.644          |                |                                |                |               |              |
| •650                     | -116           | -136           | 149         | 201            | -•607<br>-•572 | 125            | 000                            |                |               |              |
| •750                     | 057            | 062            | 070         | -•105          | -•572<br>-•528 | 125<br>069     | 080<br>019                     | 134            | 361           | 475          |
| .850                     | 004            | •001           | 005         | 033            | -•326<br>-•469 | -•069<br>-•025 | •023                           | -•087<br>-•051 | 323           | - 449        |
| •900                     | •020           | •031           | .02B        | •036           | 443            | 004            | •045                           | -±031<br>-±026 | 281<br>258    | 425<br>409   |
|                          |                |                |             |                | Right          | side           | ·                              |                |               |              |
| •025                     | -1.123         | 057            | •384        | •566           | •664           | 999            | 139                            | •254           | •401          | •481         |
| •075                     | 581            | 136            | •172        | <b>•</b> 360   | • 505          | - 592          | 219                            | 026            | •130          | •481<br>•260 |
| 150                      | 389            | 145            | •075        | •233           | •373           | 284            | <b></b> 169                    | 101            | 020           | •093         |
| •250                     | <b>~•3</b> 31  | 180            | 017         | •117           | <b>.</b> • 239 |                |                                |                |               |              |
| •350<br>•450             | -•298          | 198            | 081         | •024           | •134           |                |                                |                |               |              |
| •550                     | -•260<br>-•211 | 203            | 120         | 040            | •047           |                |                                |                |               |              |
| •650                     | 143            | -•180<br>-•122 | 122         | 070            | 012            | 145            |                                |                |               |              |
| 750                      | 064            | 122<br>043     | 090<br>045  | -•061<br>-•028 | -•035<br>053   | 105            | 062                            | <b></b> 098    | 125           | 175          |
| 850                      | •020           | -•0 <b>4</b> 5 | •034        | •028           | ~•053<br>~•052 | 076            | 022                            | 060            | 114           | 196          |
| •900                     | •058           | •064           | •057        | •045           | -•092<br>-•088 | -•017<br>•011  | •043<br>•060                   | •004           | 069           | 190          |
|                          |                |                |             | ****           | •000           | #U11           | •0•0                           | •020           | -•070         | 213          |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE SOW POSITION;  $i_t$  = 0° - Continued (h)  $\alpha$  = 9.7°; M = 0.85

|                               |               |                | Cp             | for-            |                       | Cp for-       |                       |              |              |                  |  |
|-------------------------------|---------------|----------------|----------------|-----------------|-----------------------|---------------|-----------------------|--------------|--------------|------------------|--|
| x                             | B=-3.9°       | B=0°           | B=3.9°         | B=7.9°          | B=12.70               | B=-3.9°       |                       | B=3.9°       | <del></del>  | B=12.70          |  |
| <del>x</del> - C <sub>v</sub> |               | Z              | by = 0.1       | /               |                       |               | 2/                    | by = 0.      | 38           | -                |  |
| •                             |               |                |                |                 | Left s                | ide           |                       |              |              |                  |  |
| •000<br>•025                  | •339          | 878<br>115     | 424<br>103     | 240             | -1:021                | :364<br>:324  | -: 739                | -1:186       | -1:009       | -1.055<br>-1.064 |  |
| •025                          | -•068<br>•013 | 132            | 308            | 558             | -1.070                | 149           | 154                   | 468          | -1.454       | -1.083           |  |
| 150                           | 024           | 175            | 387            | 605             | 751                   | •055          | 161                   | 381          | 711          | -1.017           |  |
| • 250                         | 032           | 121            | 266            | 434             | 508                   | 019           | 178                   | 328<br>317   | 478<br>401   | 932<br>810       |  |
| •350                          | 062           | 136            | 243            | 335             | 433<br>202            | 089<br>148    | 215<br>246            | 298          | 385          | 673              |  |
| • 450                         | 089           | 168            | 239            | ~•290<br>-•255  | -•393<br>-•356        | 138           | -•2 <b>07</b>         | 239          | 306          | 568              |  |
| •550                          | 091           | 156            | 206<br>169     | 216             | 328                   | 118           | 162                   | 176          | 226          | 485              |  |
| •650<br>750                   | 074<br>059    | -•131<br>-•101 | -•135          | 172             | 313                   | 074           | 097                   | 103          | 139          | 406              |  |
| ∙750<br>•850                  | 018           | 036            | 059            | 087             | 226                   | •000          | 006                   | 009          | 040          | 301              |  |
| 900                           | .019          | •011           | 012            | 039             | 170                   | •042          | .044                  | •042         | •011         | 237              |  |
| • / • •                       |               |                |                |                 | Right                 | side          |                       |              |              |                  |  |
| •025                          | 052           | 016            | 041            | .325<br>.289    | •753<br>•492          | -1.069<br>455 | 050<br>121            | •371<br>•166 | •586<br>•368 | •713<br>•526     |  |
| •075                          | 332           | 135<br>154     | .025<br>.005   | •289<br>•217    | •347                  | -372          | 139                   | •069         | •235         | .381             |  |
| •150<br>•250                  | 365<br>271    | 108            | 022            | 159             | 252                   | 315           | 159                   | 004          | .137         | •259             |  |
| •350                          | 252           | 138            | 055            | •077            | .163                  | 296           | 185                   | 055          | •061         | · 166            |  |
| •450                          | 241           | 159            | 085            | •009            | •078                  | 271           | 209                   | 106          | 020          | •072             |  |
| •550                          | 191           | 135            | 072            | 014             | •051                  | 22e           | 189                   | 120          | 054          | •019             |  |
| <b>♦650</b>                   | 151           | <b>~•107</b>   | 052            | 020             | •029                  | 162           | 139                   | 092          | 050<br>023   | 008<br>017       |  |
| •750                          | ~•115         | 084            | 035            | 010             | •016                  | 07E           | 065<br>.023           | 043<br>.031  | •031         | 008              |  |
| •850                          | 035           | 009            | .018<br>.036   | •024<br>•037    | •019<br><b>-•00</b> 1 | .04E          | •045                  | 046          | •037         | 041              |  |
| •900                          | •005          | •021<br>Z/     | by = 0.        |                 |                       | -             |                       | v = 0.93     | -            |                  |  |
|                               |               |                | - U.           |                 | Left                  | s ide         | / - /                 | 7 0.00       |              |                  |  |
|                               |               |                |                |                 |                       | <del></del> - | (05                   | . 212        | 268          | 659              |  |
| •000                          | •336          | •676           | •368<br>-1•251 | -:139<br>-1:392 | -•656<br>-•737        | 194           | •605<br><b>-</b> •266 | -1.177       | 811          | 574              |  |
| •025<br>•075                  | •327<br>•153  | -•154<br>-•179 | -1.4251<br>677 | -1.296          | 739                   | 034           | 290                   | 719          | 785          | 563              |  |
| •150                          | •036          | -•177          | 461            | -1.087          | 726                   | 158           | 227                   | 435          | 806          | 564              |  |
| 250                           | 051           | 216            | 354            | 838             | 703                   | 111           | 141                   | 246          | 705          | 578              |  |
| 350                           | 118           | 239            | 306            | 667             | 683                   |               |                       |              |              |                  |  |
| •450                          | 165           | 252            | 280            | 462             | 663                   | 1             |                       |              |              |                  |  |
| 550                           | -4175         | 217            | 230            | 309             | 630                   | - 12:         | 095                   | 139          | 388          | 510              |  |
| •650                          | 131           | 151            | 157            | -•187<br>-•097  | -∙599<br>-•558        | 12!<br>06!    | 030                   | 038          | 331          | 485              |  |
| 4750                          | 067           | 075<br>002     | 078<br>006     | 026             | 508                   | 01            | •021                  | 051          | 278          | 455              |  |
| ◆850<br>◆900                  | •023          | •033           | •032           | •007            | 489                   | •000          | •044                  | 029          | 249          | 445              |  |
| .,,,,                         | 1023          | •033           |                |                 | Right                 | side          |                       | <del> </del> |              |                  |  |
|                               | 1 222         | _ ^/           | 270            |                 | •664                  | -1.164        | 155                   | •246         | •401         | •483             |  |
| •025                          | -1.258<br>534 | 061<br>144     | •378<br>•166   | ●564<br>●358    | •503                  | 701           | 260                   | 043          | .116         | .261             |  |
| 150                           | 402           | 152            | .059           | •226            | .364                  | 310           | 192                   | 130          | 052          | •082             |  |
| 250                           | 349           | -+195          | 029            | .107            | .232                  |               |                       |              |              |                  |  |
| • 350                         | 310           | 227            | 103            | •006            | •117                  |               |                       |              |              |                  |  |
| • 450                         | 268           | 232            | 142            | 063             | •025                  |               |                       |              |              |                  |  |
| •550                          | 216           | 200            | 145            | -•099<br>-•083  | 043<br>070            | 100           | 074                   | 100          | 150          | 214              |  |
| •650                          | 145           | 136<br>061     | 109<br>052     | 052             | 089                   | 0.7           | 033                   | 065          | 127          | 232              |  |
| ●750<br>●850                  | •030          | •033           | •036           | •017            | 086                   | 003           | .043                  | •002         | 077          | 221              |  |
| 900                           | 065           | •062           | .061           | .033            | 123                   | •010          | .061                  | .022         | 074          | 244              |  |
|                               | 1             |                |                |                 |                       | <del></del> _ |                       |              |              |                  |  |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_t = 0^\circ$  - Continued (i)  $\alpha = 9.7^\circ$ ; M = 0.90

| .000<br>.025<br>.075 | \$ = -3.9°     | 7              | <i></i>             | for-<br>B=7.9°       | B=12.7°        | B=-3.9°      |               | Cp for        |               | ,            |
|----------------------|----------------|----------------|---------------------|----------------------|----------------|--------------|---------------|---------------|---------------|--------------|
| • 000<br>• 025       | •298           | 7              | I'                  | D=1.95               | 1/95/2/-       |              |               |               |               | 10.000       |
| •000<br>•025         |                | 2/             | hu =01              | <del></del>          | 1 <del>/</del> | 203.9        | <u> </u>      | 1/-           | B=7.9°        | B=12.7°      |
| •025                 |                |                | 0.7                 | //                   |                |              | Z/            | $b_V = 0.3$   | <i>88</i>     |              |
| •025                 |                |                |                     |                      | Left s         | ide          |               | •             | -             |              |
|                      | - AGE          | •908           | •421                | 149                  | •109           | •527         | •750          | €571          | •147          | 478          |
| •075 1               |                | 093            | 019                 |                      | -1.313         | •324         | -•098         |               | -1.377        | 977          |
| 150                  | •022<br>-•005  | 122<br>178     | 249<br>411          | 490<br>587           | -•976<br>-•728 | •153<br>•055 | 154<br>162    | 523<br>463    | -1.230<br>740 | 992<br>955   |
| 250                  | 024            | 121            | 289                 | -4507<br>-4505       | -#128<br>-#606 | 018          | 181           | 337           | 645           | 883          |
| •350                 | 060            | 142            | 255                 | 405                  | 506            | 095          | 229           | 355           | 466           | 798          |
| ·450                 | 095            | 178            | 269                 | 322                  | -4437          | 164          | 272           | 345           | 308           | 682          |
| ●550                 | 101            | 173            | <b>2</b> 21         | 245                  | <b></b> 381    | 163          | 236           | 237           | 305           | 588          |
| •650                 | -•089          | 146            | 171                 | <b>-</b> •210        | 339            | 144          | -•181         | 181           | 253           | 521          |
| •750                 | 071            | <b>-</b> •109  | 134                 | 179                  | ~.342          | 088          | 104           | 103           | 152           | 451          |
| ●850<br>●900         | 020<br>.015    | 033<br>.011    | ~•062<br>-•006      | 094<br>039           | -•281<br>-•204 | 004          | -•003<br>•047 | -•003<br>•049 | 040<br>.016   | 354<br>288   |
| • • • • •            | .015           | •011           |                     | -1037                | Right          | side         | *047          | 8049          | *016          | - 0 2 0 0    |
| •025                 | •039           | •001           | 054                 | .320                 |                | 969          | 042           | •375          | <b>4587</b>   | •724         |
| 075                  | 271            | 126            | 034                 | •320<br>•295         | •751<br>•503   | 568          | 121           | 173           | 368           | 538          |
| •150                 | 408            | 158            | •021                | .230                 | • 364          | 424          | 145           | •074          | •238          | .394         |
| ♦250                 | - • 293        | 116            | 007                 | 166                  | • 268          | 327          | 162           | •002          | •139          | .273         |
| •350                 | -•276          | 146            | 050                 | •080                 | •171           | 341          | 202           | 062           | •057          | 176          |
| •450<br>•550         | 274<br>208     | 174<br>153     | 079<br>077          | •007<br><b>-•013</b> | •082           | 310          | 233<br>214    | 119           | -•027         | •078<br>•016 |
| 4650                 | 155            | 112            | 057                 | 011                  | •051<br>•030   | 234<br>168   | 160           | 139<br>114    | 063<br>064    | 013          |
| 750                  | 119            | 088            | 045                 | 011                  | •006           | 080          | 069           | 053           | 031           | 025          |
| 850                  | 039            | 007            | •011                | .020                 | •003           | •018         | 023           | .027          | •024          | 025          |
| •900                 | •006           | .025           | .033                | •030                 | 019            | •052         | .046          | •043          | .031          | 059          |
|                      |                | 2/             | b <sub>v</sub> = 0. | 66                   | ·              |              | Z/b           | v =0.93       |               |              |
|                      |                |                |                     |                      | Left           | s ide        |               |               |               |              |
| •000                 | •396           | •688           | •438                | •006                 | 532            | •383         | •607          | •279          | 143           | 604          |
| •025                 | •321           |                | -1.179              | -1.417               | 711            | •178         | 274           | -1.137        | 898           | 565          |
| •075                 | •149           | 178            | 997                 | -1.311               | -•721          | ~.056        | 331           | -1.118        | 837           | 553          |
| •150<br>•250         | •031<br>••064  | 210<br>234     | 421<br>413          | -1.130<br>795        | -•717<br>-•701 | 262<br>153   | 248<br>136    | 511<br>195    | 828<br>744    | 553          |
| 350                  | 144            | -•234<br>-•281 | 378                 | -6795<br>-639        | 684            | -6155        | -6130         | 145           |               | 567          |
| 450                  | 214            | 285            | 249                 | 523                  | 658            |              |               |               |               |              |
| •550                 | 220            | 246            | 233                 | 397                  | 630            |              |               |               |               |              |
| 650                  | 151            | 158            | 157                 | 253                  | 593            | 137          | 093           | 147           | ~.412         | 513          |
| •750                 | 077            | 076            | ~.073               | 126                  | 561            | -•073        | 021           | 093           | 357           | 492          |
|                      | -•009          | •006           | •005                | 028                  | 515            | 021          | •034          | 051           | 292           | - • 467      |
| •900                 | •023           | •039           | •039                | •011                 | -•498<br>Right | 002<br>side  | •051          | 029           | 254           | 453          |
| .025                 | -1.156         | 062            | •371                | •561                 | #/ <i>y///</i> | -1.184       | 145           | •241          | •403          | 4499         |
| 075                  | <b></b> 938    | 144            | 165                 | 350                  | •509           | -1.061       | 332           | 065           | 117           | 273          |
| •150                 | 358            | 158            | .066                | .225                 | •372           | 401          | 212           | 202           | 070           | •089         |
| 250                  | 409            | 210            | 038                 | •105                 | • 242          |              |               |               |               |              |
| • 350                | 371            | 253            | 123                 | 001                  | •124           |              |               |               |               |              |
| 450<br>4550          | -•262<br>-•235 | 265            | 181                 | 089                  | •024           |              |               |               |               |              |
| 650                  | 155            | 228<br>150     | 179<br>127          | 129<br>112           | -•047<br>-•082 | 115          | -•077         | 113           | 160           | 235          |
| 750                  | 072            | 060            | 059                 | 063                  | 106            | 080          | 026           | 073           | 134           | 245          |
| 850                  | •028           | •041           | .033                | .012                 | 094            | 012          | 049           | •007          | 077           | - 226        |
| •900                 | .064           | •071           | .059                | .032                 | 128            | •011         | .065          | .026          | 070           | 245          |

TABLE VI. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE 10W POSITION;  $i_t=0^\circ$  - Continued (j)  $\alpha=9.7^\circ$ ; M=0.92

|                   |                |                | Cp                    | for-                           |             |   | -            | Cp for         | _                     |         |
|-------------------|----------------|----------------|-----------------------|--------------------------------|-------------|---|--------------|----------------|-----------------------|---------|
| <u> </u>          | B=-3.9         |                |                       | B=7.9°                         | B=12.7°     | B=-3.9"                                 | B=0°         | B=3.9°         | B=7.9°                | B=12.7° |
| $\frac{x}{c_{v}}$ |                | Z/             | by = 0.               | //                             |             |   | Z            | 1by = 0.       | 38                    |         |
| ·                 |                |                |                       |                                | Left s      | ide                                     |              |                |                       |         |
| •000<br>•025      | •308           | •971           | •451                  | 123                            |             | •562                                    | •742         | •593           | •175                  |         |
| •075              | -•065<br>•040  | -•053<br>-•077 | •041<br>-•166         | 403<br>447                     |             | •330<br>•162                            | 049<br>108   | 989            | -1.369                |         |
| • 150             | .023           | 140            | 329                   | 555                            |             | •068                                    | 130          | -•419<br>-•372 | -1.227<br>734         |         |
| <b>•250</b>       | •004           | 102            | 243                   | 516                            |             | 009                                     | 155          | 317            | 658                   |         |
| • 350             | 040            | 132            | ~.235                 | 431                            |             | 084                                     | 208          | 347            | 545                   |         |
| • 450             | -•078          | 178            | 261                   | 355                            |             | 153                                     | 263          | 370            | 308                   |         |
| .550<br>.650      | -•095<br>-•089 | 188            | 232                   | 252                            |             | 172                                     | 251          | 249            | 299                   |         |
| •750              | 073            | 172<br>145     | 184<br>151            | -•206<br>-•169                 |             | 151                                     | -•205        | 188            | 259                   |         |
| 850               | 024            | 065            | 073                   | 096                            |             | 094                                     | 0119<br>012  | 115<br>013     | 162<br>045            |         |
| 900               | .010           | 008            | 015                   | 043                            |             | •037                                    | •042         | •040           | •010                  |         |
|                   |                |                |                       | ••••                           | Right       | side                                    |              | *040           |                       |         |
| •025              | •114           | •044           | •004                  | • 302                          |             | 860                                     | 007          | •393           | •592                  |         |
| •075              | 186            | 083            | •066                  | • 320                          |             | 465                                     | 084          | •193           | •375                  |         |
| .150<br>.250      | 332<br>256     | 123<br>095     | •059                  | • 256                          |             | 374                                     | -•111        | •096           | .246                  |         |
| 4350              | 260            | 134            | •033<br><b>~•</b> 010 | •179<br>•092                   |             | 303                                     | 144          | •016           | .141                  |         |
| 450               | 273            | 176            | 056                   | •012                           |             | -•337<br>-•337                          | 189<br>231   | 052<br>113     | •055<br><b>-</b> •027 |         |
| •550              | 216            | 170            | 069                   | 009                            |             | 236                                     | 226          | 147            | 070                   |         |
| <b>.650</b>       | 160            | 134            | 060                   | 009                            |             | 173                                     | 176          | 122            | 079                   |         |
| •750              | 126            | 116            | 048                   | 020                            |             | 084                                     | 087          | 061            | 043                   |         |
| 850               | 042            | 027            | •006                  | •018                           |             | •011                                    | +015         | •020           | .016                  |         |
| •900              | 005            | •006           | .027                  | •023                           | <del></del> | •048                                    | *042         | •034           | •022                  |         |
|                   |                |                | $b_v = 0$             | .66                            | 1 - 61      | L.,                                     |              | v =0.93        |                       |         |
|                   |                |                |                       |                                | Left        | s ide                                   |              |                |                       |         |
| •000              | •413           | •679           | .438                  | •036                           |             | •411                                    | +610         | •295           | 108                   |         |
| •025<br>•075      | •324<br>•157   | 104            | -1.126                | -1.447                         |             | •186                                    | 245          | -1.120         | 822                   |         |
| 150               | •040-          | -•142<br>-•176 | 930<br>402            | -1.318<br>-1.153               |             | 044                                     | 301<br>243   | -1.077         | 816                   |         |
| •250              | 057            | 214            | 409                   | 813                            |             | 152                                     | 134          | 507<br>192     | 826<br>784            |         |
| ø350              | 141            | 280            | 430                   | 640                            |             | • | <b>U</b> IJ4 | • • • • •      | • / 0 4               |         |
| · 450             | 215            | 300            | 258                   | 542                            |             |   |              |                |                       |         |
| a550              | 219            | -•266          | 231                   | 431                            |             |   |              |                |                       |         |
| •650              | 156            | 171            | 167                   | 279                            |             | 137                                     | 102          | 150            | 431                   |         |
| ●750<br>●850      | 078<br>006     | ~∙078<br>-•002 | 081<br>003            | 148                            |             | 066                                     | 031          | <b>-</b> ∗095  | 370                   |         |
| 900               | •024           | 4035           | •034                  | <b>~</b> .045<br><b>~</b> .002 |             | +0017                                   | •026<br>•047 | 056<br>031     | 309<br>277            |         |
|                   | <b>—</b>       |                |                       | 1302                           | Right       | <del></del>                             | • U = /      |                | -0211                 |         |
| •025              | -1.080         | 035            | •383                  | •556                           | ,,,,,,,,    | -1.118                                  | 133          | •249           | •401                  |         |
| ●075              | 789            | 119            | .181                  | • 352                          |             | 977                                     | 314          | 053            | 115                   |         |
| •150              | 361            | 137            | •079                  | •227                           |             | 363                                     | 210          | 193            | 067                   |         |
| •250<br>•350      | 420            | 199            | 028                   | •102                           |             |   |              |                |                       |         |
| a 450             | 247            | -•252<br>-•273 | 117<br>186            | -•004<br>-•094                 |             |   |              |                |                       |         |
| -550              | 233            | -•279<br>-•239 | 197                   | ~•139                          |             |   |              |                |                       |         |
| •650              | 151            | 176            | 134                   | 127                            |             | 112                                     | 079          | 115            | 176                   |         |
| •750              | 068            | 045            | 068                   | 076                            |             | 074                                     | 029          | 074            | 144                   |         |
| e850              | •029           | •036           | •027                  | •002                           |             | 005                                     | •049         | •000           | 080                   |         |
| 4900              | •069           | •06B           | •053                  | •023                           |             | •015                                    | .064         | •020           | 082                   |         |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONDAL TAIL. HORIZONDAL TAIL IN THE LOW POSITION;  $i_t \approx 0^\circ$  - Continued

| (k) | α = | 15 | 60: | M | = | 0.60 |
|-----|-----|----|-----|---|---|------|
|     |     |    |     |   |   |      |

|                   | T              | <del></del>    | Cp             | for-                           |                         | T              |                | Co for        |   |              |
|-------------------|----------------|----------------|----------------|--------------------------------|-------------------------|----------------|----------------|---------------|---|--------------|
|                   | R=-30          | 9 B = 0°       |                | 1º B=7.9                       | · B=12.70               | B=-3.9°        |                | 7             |   | T 6          |
| $\frac{x}{C_{v}}$ | <i>J</i> 3.5   |                | <u> </u>       |                                | B=12.7                  | 13 = - 3.90    | <u>'</u>       | B=3.9°        | B=7.9°                                  | B=12.7°      |
| ٧ '               | ļ              |                | 6v = 0         | .//                            |                         | <u> </u>       |                | $b_V = 0.3$   | <i>38</i>                               |              |
|                   |                |                |                |                                | Left s                  | ide            |                |               |   |              |
| •000              | 332            | •815           | •199           | •103                           | 514                     | .274           | •733           | •409          | 402                                     | 999          |
| •025<br>•075      | 644<br>198     | 158<br>158     | •296<br>•021   | •112<br>••089                  | -• <b>53</b> 2<br>-•462 | •209           | 112            | 350           |   | -1.090       |
| 150               | 085            | 178            | 141            | 205                            | 437                     | •080           | 158<br>162     | 319<br>280    | 530<br>416                              | 931<br>746   |
| • 250             | 042            | 139            | 152            | 195                            | 371                     | 011            | 169            | 265           | ~.361                                   | - • 600      |
| • 350             | 031            | 123            | 175            | 206                            | -•3 <b>3</b> 5          | 054            | 196            | 269           | 323                                     | 501          |
| • 450             | 038            | 142            | -•193          | 208                            | 297                     | 081            | 208            | 253           | 296                                     | 424          |
| .550<br>.650      | 047            | -•153<br>-•121 | 179            | 193                            | <b>25</b> 1             | 076            | 185            | -•217         | 251                                     | 355          |
| •750              | 051            | -•121<br>-•110 | -•143<br>-•125 | 157<br>132                     | 210<br>170              | 072            | 158            | 179           | -•206                                   | 297          |
| <b>850</b>        | 035            | 066            | 087            | 089                            | -•108                   | 063<br>020     | -•107<br>-•046 | 118<br>062    | 150<br>093                              | 224          |
| •900              | 022            | 032            | 055            | 055                            | 070                     | 178            | 190            | 166           | 177                                     | 154<br>160   |
|                   |                |                |                |                                | Right                   | side           |                |               | • |              |
| • 025             | •324           | 103            | 798            | 298                            | 102                     | 569            | 110            | •112          | •197                                    | •200         |
| ●075              | 072            | <b>18</b> 5    | 229            | 089                            | .012                    | 409            | 160            | 024           | 121                                     | 214          |
| ♦150              | 198            | 167            | 075            | 010                            | •087                    | 332            | 162            | •012          | •089                                    | .216         |
| •250              | 194            | 121            | 015            | •035                           | •132                    | 293            | 167            | •001          | •080                                    | •227         |
| •350<br>•450      | 203<br>212     | 130<br>144     | 001            | •053                           | •148                    | 271            | 178            | 024           | +064                                    | • 205        |
| •550              | 189            | 139            | 008<br>017     | •044<br>•033                   | •134<br>•100            | 259<br>219     | -•194<br>-•180 | 046           | •042                                    | •182         |
| •650              | 149            | 112            | 021            | •017                           | •066                    | -173           | 144            | 053<br>044    | ●028<br>●024                            | •146<br>•114 |
| •750              | 119            | 094            | 017            | •008                           | •041                    | 112            | -091           | 024           | •024                                    | 087          |
| •850              | 069            | 037            | 003            | •015                           | •019                    | 047            | 023            | •008          | •035                                    | •069         |
| •900              | 047            | 014            | •003           | •010                           | •012                    | 020            | 012            | •003          | •021                                    | • 046        |
|                   |                | Z/             | $b_V = 0$      | .66                            |                         |                | Z/b,           | -0.93         |   |              |
|                   |                |                |                |                                | Left                    | s ide          |                |               |   |              |
| •000              | 020            | •630           | •105           | 636                            | 984                     | •098           | •543           | 145           | 620                                     | 816          |
| •025              | •370           | 130            | 963            | -1.328                         | -1.022                  | •200           | 208            | 949           | 810                                     | 650          |
| •075              | •189           | 160            | 544            | -1.199                         | -1.002                  | •010           | 190            | 470           | 778                                     | 650          |
| •150<br>•250      | •078·<br>•001  | -•171<br>-•178 | 402<br>321     | 893                            | 968                     | 094            | 171            | 303           | 706                                     | 637          |
| •350              | 054            | -•176<br>-•194 | 287            | <b>~</b> •517<br><b>~</b> •355 | 879<br>741              | 072            | 114            | <b>-</b> •229 | -6611                                   | 600          |
| 4450              | 087            | 201            | 262            | <b>-</b> •283                  | 598                     |                |                |               |   |              |
| <b>●</b> 550      | 099            | 190            | 226            | 240                            | 473                     |                |                |               |   |              |
| •650              | 085            | 149            | 172            | 177                            | <b>-•369</b>            | 110            | 085            | 147           | 343                                     | 451          |
| •750              | 051            | 094            | 107            | 123                            | <b></b> 287             | 074            | 053            | 123           | 289                                     | 410          |
| ●850<br>●900      | -•015<br>-•006 | -•037<br>-•016 | 051<br>024     | 075                            | 215                     | 054            | 014            | 096           | 235                                     | 369          |
| 1900              | -•008          | -4016          | 024            | 046                            | <b></b> 183             | -•035          | •004           | 069           | 202                                     | 342          |
| •025              | -1.038         | 112            | 200            |                                | Right                   |                |                |               |   |              |
| •075              | 599            | -•112<br>-•162 | •382<br>•166   | ∙553<br>•348                   | •558<br>•431            | 811<br>531     | 167<br>201     | •220<br>••006 | •334<br>•100                            | •391         |
| •150              | 395            | 160            | •078           | 224                            | •343                    | -•331<br>-•339 | 180            | <b></b> 008   | •100<br>-•042                           | •202<br>•055 |
| • 250             | 332            | 176            | •010           | •130                           | .254                    | /              |                | ••/0          | • • • • •                               | ورن          |
| •350              | ~∙305          | 194            | 042            | •066                           | •191                    |                |                |               |   |              |
| • 450             | 268            | 201            | 071            | •033                           | +141                    |                |                |               |   |              |
| •550<br>•650      | -•228<br>-•140 | 176            | 078            | <b>800</b>                     | •105                    |                |                |               |   |              |
| ●650<br>●750      | -•169<br>-•106 | 137<br>085     | ~•055<br>~•030 | .00B                           | •084                    | 081            | 089            |               |   | 086          |
| 850               | 024            | -•085<br>-•005 | •021           | •017<br>• <b>044</b>           | •057<br>•039            | 121<br>069     | -•057<br>•004  |               |   | - 120        |
| 900               | •001           | •016           | .033           | •037                           | •021                    | 047            | •018           |               |   | 111<br>133   |
|                   | <u> </u>       |                |                |                                |                         |                |                |               |   |              |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE LOW POSITION;  $i_t \approx 0^\circ$  - Continued (1)  $\alpha = 15.8^\circ$ ; M = 0.80

|                   |                |                | Cp.            | for-           | <del></del>    |              |              | Cp for         | _             |                |
|-------------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|----------------|---------------|----------------|
| <u> x</u>         | B=-3.9         | 7              | <u></u>        | <u> </u>       | B=12.7°        | B=-3.9°      | B=0°         | B=3.9°         | B=7.9°        | B=127          |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1       | 7              |                |              | 2/           | $b_V = 0.3$    | <i>38</i>     |                |
|                   |                |                |                |                | Left s         | ide          |              |                |               |                |
| .000<br>.025      | 025<br>991     | •857<br>•095   | •398<br>•351   | •216<br>•081   | 494<br>460     | •399<br>•004 | •774<br>•054 | 420<br>357     | 203<br>600    | - 656<br>- 795 |
| •075              | 639            | 105            | •005           | 115            | 429            | 078          | 155          | 355            | 502           | 720            |
| .150              | 299            | 209            | 210            | 254            | -,429          | 076          | 174          | 323            | 441           | 630            |
| • 250             | 144            | 152            | 193            | -,219          | 372            | 066          | 187          | 304            | 405           | 561            |
| • 350             | 080            | 133            | 208            | 227            | ~•329          | 076          | -•212        | 292            | 372<br>330    | - 493          |
| .450<br>.550      | -•046<br>-•035 | 147<br>153     | -•219<br>-•202 | -•224<br>-•195 | -•287<br>-•241 | 083<br>064   | 231<br>208   | ~•278<br>~•236 | 280           | 433<br>365     |
| •650              | 028            | 115            | 157            | 163            | 202            | 055          | 174          | 193            | 233           | 307            |
| •750              | 029            | 114            | 146            | 142            | 165            | 037          | 114          | 133            | 165           | 237            |
| .850              | 022            | 06B            | 099            | 089            | 106            | 006          | 041          | 063            | 100           | 170            |
| • 900             | 005            | 033            | 064            | 059            | 074            | 172          | 179          | 145            | 147           | 137            |
|                   |                |                |                |                | Right          | side         |              |                |               |                |
| <b>●025</b>       | • <b>420</b>   | 772            | 961            | 517            | 293            | 465          | 293          | 036            | •025          | • 044          |
| •075              | 011            | 422            | 664            | 269            | 176            | 392          | 278          | 105            | 020           | •085           |
| •150<br>•250      | -+217<br>-+214 | 257<br>152     | 325<br>152     | 172<br>094     | 064<br>.035    | 349<br>310   | 225<br>176   | 092<br>064     | -•020<br>•004 | •141<br>•185   |
| •350              | 226            | 102            | 080            | 038            | •096           | 293          | 165          | 057            | .013          | 199            |
| 450               | 220            | 091            | 046            | 005            | •125           | - 272        | 174          | 063            | .016          | •191           |
| •550              | 188            | 085            | 031            | .012           | •110           | 237          | 155          | 055            | .018          | .164           |
| +650              | 148            | 068            | 020            | .013           | •075           | 185          | 117          | 042            | .025          | .135           |
| •750              | 134            | 062            | 019            | .016           | •047           | 118          | 068          | 014            | .032          | •099           |
| .850              | 073            | 024            | 002            | •022           | •029           | 046          | 003          | •016           | .044          | •075           |
| •900              | -•055          | 007            | •004           | •021           | •013           | 023          | *008         | •010           | •029          | •041           |
|                   |                |                | $b_{V} = 0.$   |                | 1 - 6 4        | L            |              | y =0.93        |               |                |
|                   |                |                |                |                | Left           | side         |              |                |               |                |
| •000              | •320           | •667           | •430           | •001           | ~.538          | •241         | •572         | .128           | 346           | 745            |
| .025              | •312           | -•109          | -1.076         | -1+314         | 901            | •177         | 257          | -1.064         | 833           | 628            |
| •075              | •143           | -+159          | 572            | -1.159         | 890            | 011<br>115   | 234<br>191   | 619<br>308     | 784<br>710    | 605<br>588     |
| •150<br>•250      | 012            | 188<br>202     | 436<br>334     | -•878<br>-•544 | 856<br>792     | 064          | 114          | 223            | 610           | 563            |
| 350               | 060            | -•202<br>-•217 | 299            | 385            | 697            |              |              | •===           | •010          | • > • >        |
| 450               | 093            | 228            | 275            | 296            | 580            |              |              |                |               |                |
| •550              | 102            | 214            | 237            | 239            | 475            | 1            |              |                |               |                |
| •650              | 076            | 159            | 172            | 171            | ~.385          | 095          | 070          | 131            | 345           | 415            |
| <b>₽750</b>       | 034            | 085            | 099            | 104            | 305            | 064          | 026          | 095            | 281           | 382            |
| •850<br>•900      | •000<br>•013   | 024<br>.002    | 028<br>.002    | 050<br>020     | -•240<br>-•209 | 031<br>012   | •012<br>•034 | 061<br>036     | 221<br>181    | 349<br>330     |
| •900              | •013           | •002           | •002           |                |                |              |              | -4036          | 151           | - 6 3 3 0      |
| •025              | -1.211         | 144            | •325           | •533           | Right          | -1.005       | 173          | •201           | •359          | .456           |
| 075               | 590            | 184            | 124            | •314           | • 462          | 647          | 226          | 040            | 109           | 256            |
| .150              | 413            | 153            | .051           | .202           | • 367          | 331          | 178          | 125            | 050           | .082           |
| •250              | 349            | 168            | 011            | •122           | •291           |              |              |                |               |                |
| •350              | 310            | 184            | 061            | •054           | •222           |              |              |                |               |                |
| •450<br>•550      | -•272<br>-•226 | 184<br>162     | 083<br>078     | •022<br>•006   | •164<br>•127   |              |              |                |               |                |
| •650              | 162            | 115            | 078            | •015           | •097           | 115          | 064          | 067            | 071           | 090            |
| •750              | 089            | 057            | 028            | 024            | •072           | 101          | 030          | 061            | 076           | 110            |
| <b>850</b>        | 003            | .023           | .036           | .059           | •055           | 034          | •037         | •002           | 026           | 101            |
| •900              | •027           | •047           | <b>.048</b>    | •054           | •024           | 015          | •049         | •017           | 024           | 124            |

TABLE VI.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE WING, FUSELAGE, VERTICAL TAIL, AND HORESONTAL TAIL. HORIZONTAL TAIL IN THE BOW POSITION;  $i_t = 0^\circ$  - Concluded

(m)  $\alpha = 15.9^{\circ}$ ; M = 0.85

|                     |                |                | Cp                       | for-         |               |               | (              | Cp for                | _              |              |
|---------------------|----------------|----------------|--------------------------|--------------|---------------|---------------|----------------|-----------------------|----------------|--------------|
| Y                   | B=-3.9         | B=0°           | B=3.90                   | B=7.90       | B=12.70       | B=-3.9°       | B=0°           | B=3.9°                | B=7.9°         | B=12.7°      |
| $\frac{x}{C_{\nu}}$ | <del> </del>   | Z/             | $b_V = 0.1$              | 7            |               |               | Z/             | by = 0.               | 38             |              |
| "                   |                |                | <u> </u>                 | <u>*</u>     | Left s        | ide           |                |                       |                |              |
| •000                | 357            | •905           | •565                     | 052          | 610           | 441<br>244    | •769<br>••183  | •463<br>-•520         | 211<br>672     | 589          |
| •025                | -1.038         | 009            | •281                     |              | 583           |               | 183<br>267     | 520<br>476            | -•672<br>-•576 | 764<br>699   |
| •075<br>•150        | 511<br>255     | 227<br>340     | 041<br>300               | 221<br>362   | 528<br>502    | 062           | 258            | 415                   | 524            | ~.627        |
| 250                 | 200            | 237            | 260                      | 300          | ~.438         | 114           | 243            | 362                   | 485            | 568          |
| •350                | -•183          | 192            | 256                      | 284          | <b>-</b> .378 | 169           | 267            | 341                   | 436            | 509          |
| • <del>4</del> 50   | 183            | 196            | 252                      | 269          | <b>~•315</b>  | 204           | 286            | 315                   | 381            | -4442        |
| •550                | 169            | 183            | 225                      | - 229        | ~• 25B        | 183<br>159    | 243<br>200     | 271<br>222            | 320<br>260     | 380<br>323   |
| •650<br>•750        | -•132<br>-•117 | 136<br>126     | 169<br>162               | 187<br>167   | 216<br>170    | 115           | 141            | -158                  | 188            | 249          |
| 850                 | 080            | 079            | -1114                    | 111          | 112           | 053           | 059            | 085                   | -1116          | 190          |
| 900                 | 041            | 040            | 077                      | 073          | 070           | 191           | 195            | 154                   | 153            | 137          |
|                     |                | ·              |                          |              | Right         | side          |                |                       |                |              |
| •025                | •234           | 687            | -1:129<br>-:757          | 582          | 419<br>293    | -1.084<br>798 | -•317<br>-•360 | -•033<br>-•149        | 039<br>099     | 021<br>.011  |
| •075<br>•150        | 204            | -•887<br>-•364 | 757<br>371               | 356<br>257   | 166           | 680           | -•299          | 159                   | 099            | •062         |
| •250                | -+491          | 262            | 234                      | 184          | 053           | 377           | 251            | 136                   | 066            | 119          |
| 350                 | 286            | 195            | 169                      | 116          | .026          | 307           | 234            | 125                   | 053            | .143         |
| e450                | 252            | 161            | 117                      | 068          | •072          | 294           | 237            | 125                   | 042            | 146          |
| ●550                | -•215          | 127            | 081                      | 036          | •085          | 256           | 203            | 104                   | 025            | .136         |
| 650                 | 160            | 096            | 057                      | 019          | •071          | 197           | 152            | 074                   | 007            | •119         |
| •750                | 134            | 079            | 040                      | 005          | •052          | 121           | 096            | 044                   | •00B           | •093         |
| ●850<br>●900        | -•070<br>-•048 | 037<br>024     | -•013<br>-•007           | •008<br>•003 | •034<br>•022  | 046           | 021<br>011     | 002<br>010            | •025<br>•012   | •069<br>•042 |
| 1900                |                |                | $\frac{-100}{b_{V}} = 0$ |              | •022          | 1             |                | v = 0.93              |                |              |
|                     |                |                | -7 0                     |              | Left          | side          |                | ,                     |                | <del></del>  |
| .000                | 1297           | •657           | 452                      | •115         | 341           | 255           | •567           | •179                  | 294            | 687          |
| 025                 | 289            | 172            | -1.226                   | -1.427       | 858           | 080           | 302            | -1.234                | 983            | 580          |
| •075                | 109            | 217            | -4685                    | -1.235       | 844           | 075           | 315            | 732                   | 903            | 585          |
| •150                | 013            | 240            | 497                      | 873          | 820           | 228           | 237            | 377                   | 794            | 576          |
| • 250               | 089            | 244            | 384                      | 623          | <b></b> 773   | 117           | 144            | 246                   | 679            | 548          |
| •350                | 155            | 261            | 324                      | 473          | 693           |               |                |                       |                |              |
| • 450<br>• 550      | -•198<br>-•204 | 272<br>253     | -•298<br>-•263           | 361<br>270   | 590<br>489    |               |                |                       |                |              |
| •650                | 160            | -• 185         | -189                     | 191          | 395           | 131           | 090            | 148                   | 356            | 418          |
| 750                 | 094            | -•106          | 111                      | 117          | -•318         | 097           | 045            | 109                   | 294            | 387          |
| 850                 | 042            | 040            | 037                      | 056          | 253           | 051           | •006           | 071                   | 232            | 353          |
| ●900                | 015            | 007            | 007                      | 026          | -•220         | 022           | •024           | 046                   | 192            | 327          |
|                     |                |                |                          |              | Righ          |               |                |                       |                |              |
| •025                | -1.253         | 186            | •284                     | •506         | •646          | -1.256<br>866 | 234<br>308     | •169<br><b>-•</b> 090 | •349<br>•090   | 478<br>270   |
| •075<br>•150        | -1.032<br>632  | 243<br>215     | •077<br>•001             | .277<br>.168 | ∙469<br>•367  | 506           | -•308<br>-•231 | -4188                 | 094            | •091         |
| 250                 | 301            | 229            | 061                      | •081         | 283           | 1             | •              |                       | •••            |              |
| •350                | 289            | 243            | 117                      | •019         | •213          |               |                |                       |                |              |
| •450                | 276            | 234            | 134                      | 019          | •169          | 1             |                |                       |                |              |
| •550                | 242            | 202            | 124                      | 028          | •129          |               |                | 1.0                   |                | - 016        |
| •650                | 176            | 147            | 094                      | 014          | •102          | 096           | 081<br>048     | 104<br>084            | 096<br>092     | 060          |
| •750                | 104            | -•082<br>•011  | 051<br>.020              | .008<br>.044 | ∙073<br>•058  | 110<br>045    | -048           | 084<br>011            | 038            | 110<br>099   |
| •850<br>•900        | 024            | .011<br>.035   | •020<br>•034             | ±044         | •024          | 017           | 039            | •001                  | 036            | 123          |
| . 700               | 1 .024         | •033           | •034                     | •0=0         | #UL7          |               | -027           |                       |                |              |

TABLE VII.- PREGSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL  ${\rm TAIL}$  (a)  ${\bf \sigma}$  = 0°; M = 0.60

|                   |              |                | Cp 1           | for-             |                  |               |                    | op for         | _              |            |
|-------------------|--------------|----------------|----------------|------------------|------------------|---------------|--------------------|----------------|----------------|------------|
| <u> </u>          | B=-3.9°      | ,              | I'             | B=7.9°           | B=12.7°          | β=-3.9°       | Ľ                  | B=39°          | 1/             | B=12.7     |
| $\frac{x}{C_{v}}$ |              | 2/             | bv = 0.1       | /                |                  |               | 2/                 | $b_V = 0.3$    | 38             |            |
|                   |              |                |                |                  | Left s           | ide           |                    |                |                |            |
| •000<br>•025      | •642<br>•263 | •645<br>-•113  | •338<br>•543   | -1.425<br>-1.130 | -1:27C<br>-2:267 | 27¢           | 728<br>107         | 623            | -1.079         | -1 · 19    |
| .075              | •123         | 120            | 369            | 669              | -1.505           | •13¢          | 143                | 431            | 939            | -1.10      |
| •150              | ●036         | 146            | 302            | 476              | 667              | •05C          | 146                | -•318          | -•697          | -1.05      |
| • 250             | •013         | 107            | 204            | 303              | 416              | 017           | 152                | 263            | 425            | -1.00      |
| • 350             | 021          | 111            | 167            | 236              | ~•336            | 072           | -•171<br>-•175     | ~•245<br>~•222 | 328<br>266     | 84<br>63   |
| • 450<br>550      | 067<br>069   | -•129<br>-•107 | 156<br>112     | -•199<br>-•146   | -•281<br>-•288   | 104           | 143                | 161            | 195            | - 47       |
| •550<br>•650      | 040          | 065            | 062            | 093              | 210              | 067           | 100                | 108            | 137            | - 35       |
| •750              | 010          | 021            | 016            | 047              | 123              | 028           | 040                | 039            | 065            | 22         |
| 4850              | .032         | •029           | .036           | 003              | ~•037            | •03€          | •025               | .029           | .011           | 11         |
| •900              | •055         | 059            | .066           | •031             | •009             | •064          | •061               | .068           | .050           | 05         |
|                   |              |                |                |                  | Right            | side          |                    |                |                |            |
| •025              | 452<br>374   | 035            | •306<br>•123   | •580<br>•333     | •815<br>•536     | 62(<br>418    | 063<br>125         | •364<br>•148   | •591<br>•349   | •73<br>•51 |
| •075<br>•150      | 294          | -•118<br>-•127 | •043           | •204             | •374             | 31;           | 134                | •055           | •209           | .36        |
| •250              | 205          | 104            | •013           | 130              | 265              | 253           | 146                | 014            | .105           | .23        |
| • 350             | 179          | 120            | 035            | •057             | •164             | 228           | 159                | 062            | •036           | 14         |
| 450               | 159          | 132            | 074            | •001             | 091              | 20            | 162                | 094            | 012            | • 07       |
| 550               | 120          | 109            | 064            | 017              | •057             | 16t           | 141                | 090            | 036            | •02        |
| •650              | 065          | 061            | 039            | .001             | •050             | 104           | 100                | 064            | 024            | •02        |
| •750              | 012          | 017            | 009            | •020             | •052             | 03            | 031                | 019            | •006           | •02        |
| .850              | ●052         | •043           | •045           | • 059            | •080             | •043          | •03B               | • 055          | •054           | •05        |
| • 900             | •077         | •064           | •061           | •066             | •073             | •064          | •059               | •064           | •059           | •03        |
|                   |              |                | $b_{\nu} = 0.$ | <i>bb</i>        |                  | L             | - 2/D <sub>V</sub> | -0.93          |                |            |
|                   |              |                |                |                  | Left             | s ide         |                    | 240            | 204            |            |
| •000              | •240         | •716           | •279           | 388              | 660              | •38           | <b>€668</b>        | •240           | 284            | 43         |
| <b>●</b> 025      | •337         | 141            | 808            | -1.054           | -•726<br>-•710   | 18:           | 205<br>164         | -•652<br>-•371 | 860<br>803     | 51<br>51   |
| •075<br>•150      | •151         | 159<br>169     | 481<br>360     | 953<br>780       | -•696            | •01¢<br>-•04¢ | 148                | 273            | 701            | - 0 5 5    |
| •250              | 030          | 171            | 279            | 529              | 664              | ~•03.         | 113                | 213            | 559            | 54         |
| • 350             | 081          | 182            | 247            | 360              | 633              |               | • • • • •          | <b>V</b>       | • , , ,        | •          |
| 450               | 111          | 185            | 222            | 275              | 601              |               |                    |                |                |            |
| •550              | 111          | 162            | 181            | 211              | 555              |               |                    |                |                |            |
| .650              | 083          | 118            | 117            | 151              | 500              | 06°           | 070                | 096            | 365            | 39         |
| •750              | 044          | 049            | 046            | 079              | 432              | 05:           | 038                | 071            | 342            | 36         |
| .850              | •018         | •006           | •009           | 019              | ~•365            | 028           | 008                | 048            | 294            | 33         |
| • 900             | •036         | •034           | •036           | •008             | -•327            | 00            | •018               | -•028          | 257            | 32         |
| . 605             | - 705        | _ ^3:          | 200            |                  | Right            | <del></del>   |                    | . 210          | . 24.0         | 4.4        |
| ●025<br>●075      | 705<br>466   | 074<br>141     | •380<br>•148   | • 584<br>• 345   | •683<br>•486     | 55:<br>36:    | 141<br>164         | •219<br>•009   | •368<br>•110   | • 44       |
| 150               | 329          | 146            | •055           | 206              | •329             | 264           | 155                | 046            | •006           | •08        |
| 250               | 278          | 166            | 025            | •093             | •199             |               | _                  |                | · · · · ·      |            |
| • 350             | 255          | 180            | 083            | •013             | •098             |               |                    |                |                |            |
| .450              | 218          | 169            | 108            | 033              | •032             | 1             |                    |                |                |            |
| •550              | 170          | 150            | 110            | 052              | 005              | 1             |                    |                |                |            |
| •650              | 108          | 107            | 074            | 040              | 016              | 071           | 065                | 058            | 068            | 08         |
| •750              | 044          | 047            | 030            | 012              | 028              | 06!           | 047                | 062            | 072            | 11         |
| •850              | •029         | •025           | •032           | •036<br>-050     | -•025<br>-•055   | 01(           | •011<br>•025       | •000           | -•024<br>-•017 | 10<br>13   |
| 900               | •059         | •057           | •064           | •050             | <b>-</b> •055    | 00            | •025               | •000           | 017            | )          |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL  $TAll\ - Continued$  (b)  $\alpha=0^{\circ};\ M=0.80$ 

|                   |                |                | Cp             | for-                  |                |                 | _            |                |                |            |
|-------------------|----------------|----------------|----------------|-----------------------|----------------|-----------------|--------------|----------------|----------------|------------|
| X                 | B=-3.9         | B=0°           | B=3.9°         | B=7.90                | B=12.7°        | B=-3.9°         | B=0°         | B=3.9°         | B=79°          | B=127      |
| $\frac{x}{C_{v}}$ |                | Z              | by = 0.1       | 1                     |                |                 | Z/           | by = 0.        | 38             |            |
| •                 |                |                |                |                       | Left s         | ide             | ····         |                | -              |            |
| •000<br>•025      | •745<br>•268   | •655<br>•699   | •520           | -1.127                | 247<br>-1.405  | •479<br>•319    | •761<br>•099 | - 548<br>- 935 | •061           | 547        |
| •075              | 134            | 099<br>126     | 546<br>378     | -1e127<br>-e875       |                |                 |              |                | -1-656         | 950        |
| 150               | 035            | 171            | 333            | 567                   | -1.191<br>988  | •140            | 159<br>171   | 455            | -1.469         | 942        |
| • 250             | .011           | 134            | ~.223          | 314                   | -•708          | 026             | 183          | ~•346<br>~•284 | 486<br>355     | 930<br>842 |
| • 350             | -•033          | 143            | 187            | 241                   | 486            | 085             | 205          | 269            | 323            | 738        |
| 4450              | -•079          | -4165          | 175            | 206                   | 386            | 133             | 223          | 240            | 273            | 623        |
| •550              | ~•085          | 143            | 127            | 144                   | 293            | 118             | 182          | 175            | 188            | 513        |
| .650<br>.750      | 053            | 093            | 065            | 094                   | 190            | 083             | -•130        | 107            | 111            | 425        |
| • 850             | 018<br>.032    | 040<br>.023    | 007<br>.053    | 036                   | 132            | 030             | 053          | 030            | 029            | 326        |
| 900               | 064            | •055           | •083           | .022<br>.060          | 059<br>009     | •041<br>•079    | •029<br>•066 | •050           | •049           | - + 225    |
|                   |                |                |                |                       | Right          | side            | •000         | •090           | •085           | 161        |
| •025              | 412            | 026            | •314           | •581                  | •815           | 921             | ~.099        | •361           | •587           | •743       |
| •075              | ~•396          | 131            | .131           | .344                  | •553           | - 427           | 156          | •152           | •354           | 532        |
| • 150             | 311            | 146            | •048           | •212                  | •382           | ~.336           | 160          | •053           | .213           | .377       |
| ∙250<br>•350      | 220            | 134            | •013           | +142                  | •277           | 272             | 176          | 017            | •113           | ●254       |
| • 450             | -•190<br>-•173 | 146<br>165     | 040<br>088     | •060<br><b>~</b> •007 | •170           | 249             | 197          | 074            | •032           | •152       |
| •550              | 123            | 134            | 088            | 026                   | •081<br>•038   | -,223           | 205          | 117            | 029            | •057       |
| •650              | 057            | 082            | 052            | 012                   | •028           | 171<br>094      | 174<br>120   | 118<br>077     | 056            | •008       |
| .750              | •002           | 031            | 017            | .009                  | •025           | 013             | 036          | 016            | 036<br>.005    | 004        |
| .850              | •064           | •040           | .047           | .060                  | •052           | .064            | •044         | •061           | •063           | •022       |
| • 900             | •090           | •061           | •067           | •069                  | •055           | •096            | •061         | •076           | •072           | •003       |
|                   |                | Z/             | $b_V = 0.$     | 66                    | ,              |                 | Z/b          | v =0.93        |                |            |
|                   |                |                |                |                       | Left           | side            |              |                |                |            |
| •000              | 8444           | 0743           | •491           | •020                  | 390            | +477            | •689         | •384           | 095            | 287        |
| •025<br>•075      | •332<br>•149   | 136            | -1.098         | -1.626                | 714            | •142            | 236          | -1.052         | -1.237         | 494        |
| • 150             | •025           | -•177<br>-•199 | ~•555<br>-•400 | -1.320<br>978         | 711            | 009             | 210          | 486            | -1.038         | 469        |
| 250               | 048            | 208            | 306            | 4778<br>655           | -•714<br>-•671 | 077<br>047      | 186<br>139   | 283            | 805            | 504        |
| • 350             | 106            | 223            | 263            | 395                   | 633            |                 | 139          | 234            | 592            | 506        |
| • 450             | 141            | 226            | 234            | 247                   | 582            |                 |              |                |                |            |
| • 550             | 130            | 197            | 185            | 170                   | 521            |                 |              |                |                |            |
| •650              | 091            | 131            | 113            | 095                   | 472            | 062             | 077          | 089            | 320            | 387        |
| • 750             | 042            | 057            | 034            | 032                   | 415            | 045             | 040          | 055            | 293            | 357        |
| ∙850<br>•900      | ●034<br>●057   | •012<br>•041   | .033<br>.064   | •025                  | ~•355          | 006             | • 006        | 028            | 249            | 333        |
| • 700             | .03/           | •041           | 1064           | •052                  | 323            | •020            | •029         | 010            | -•200          | 317        |
| •025              | -1.179         | 105            | •377           | 4588                  | Right          |                 |              |                |                |            |
| •075              | 501            | 180            | 152            | •350                  | 508            | -1:073<br>-:421 | 200<br>216   | -023           | •368<br>•090   | 479<br>225 |
| • 150             | -+351          | 176            | .053           | .212                  | <b>♦35</b> 6   | 266             | 188          | 068            | 023            | •081       |
| a 250             | -+299          | -•203          | 031            | •091                  | .213           |                 |              |                |                | ••••       |
| .350<br>.450      | -•264<br>-•223 | -•226          | 104            | 004                   | •102           |                 |              |                |                |            |
| • 450<br>• 550    | 168            | 216<br>186     | -•132<br>-•129 | 054                   | •025           |                 |              |                |                |            |
| •650              | 097            | -•125          | 089            | 076<br>050            | -•026<br>-•042 | 061             | m. 043       | 0==            | - 024          | _ ^^       |
| •750              | 023            | 050            | 030            | 015                   | -•042<br>-•050 | 042             | 063          | -•055<br>-•045 | -•056<br>-•056 | 083<br>123 |
| .850              | •061           | •040           | .053           | •050                  | 044            | •020            | •027         | •021           | -•001          | 109        |
| •900              | ●095           | •069           | .079           | •069                  | 070            | •026            | •043         | •033           | 009            | 140        |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TATL - Continued (c)  $\alpha = 0^{\circ}$ ; M = 0.85

|                   |                |                | Cp           | for-             |                  | <u> </u>      |                | Cp for         | _              |                |
|-------------------|----------------|----------------|--------------|------------------|------------------|---------------|----------------|----------------|----------------|----------------|
| <u></u>           | B=-3.9         | B=0°           |              | · B=7.9          | B=12.7°          | B=-3.5        | B=0°           | . 17           | 17             | B=127°         |
| $\frac{x}{c_{v}}$ |                | Z              | by = 0.      | //               |                  |               | Z              | $b_V = 0.5$    | <i>38</i>      |                |
|                   |                |                |              |                  | Left s           | ide           |                |                |                |                |
| 000               | •772<br>•270   | -:676          | •578<br>•525 | -1.034           | -1.059<br>-1.166 | 529<br>322    | -:776<br>-:078 | -1.062         | •213<br>-1•446 | 343<br>861     |
| .075              | +136           | 103            | 381          | 824              | -1.025           | 139           | 142            | 434            | -1.290         | 868            |
| •150              | +034           | -+152          | 353          | 676              | 895              | •046          | 159            | 357            | -1.146         | 861            |
| •250<br>•350      | 043            | 122            | 236<br>199   | 374<br>266       | 729<br>575       | 031           | 176            | 304            | ~+368          | 773            |
| •450              | -4096          | 136<br>162     | 187          | 203              | ~+575<br>-+467   | 100<br>158    | -•206<br>-•226 | -•281<br>-•253 | 288<br>223     | 711<br>617     |
| •550              | 101            | 136            | 132          | 135              | ~.357            | 141           | 183            | 177            | 151            | 525            |
| •650              | -•067          | 085            | 069          | 084              | <b>-</b> •251    | 097           | 125            | 107            | 087            | - 4449         |
| •750              | 030            | 029            | 002          | 023              | 179              | 047           | 042            | 029            | 013            | 359            |
| .850<br>.900      | ●030<br>■062   | •041           | •063<br>•092 | •037             | 094              | •042          | • 045          | •059           | •068           | 268            |
| • 700             | 1002           | •078           | 1092         | •072             | 036<br>Right     | 5/de          | •091           | •099           | •105           | 202            |
| •025              | -+386          | 013            | •316         | ●584             | .814             | 1             | - 000          | •357           | 500            | 740            |
| 075               | 400            | 119            | 130          | 345              | •555             | 950<br>434    | -•089<br>-•147 | •149           | •582<br>•351   | • 743<br>• 530 |
| •150              | 328            | 140            | •049         | 216              | .388             | 351           | 159            | 051            | .216           | .376           |
| • 250             | 237            | 127            | •012         | .143             | •279             | -+291         | 176            | 025            | .111           | •248           |
| •350<br>•450      | 206<br>186     | -•145<br>-•163 | 046          | +055             | •172             | 266           | ~.199          | -•088          | •023           | •145           |
| •550              | 126            | ~.136          | 100<br>106   | 020<br>043       | •070<br>•023     | 234<br>174    | -•206<br>-•176 | -•135<br>-•137 | -#050<br>-#074 | .043<br>013    |
| .650              | 060            | 076            | 063          | 024              | •009             | 094           | 115            | 095            | 054            | 026            |
| •750              | •002           | 025            | 025          | .000             | •004             | 011           | 023            | 023            | 003            | 018            |
| <b>850</b>        | •073           | 053            | .046         | •057             | •033             | •074          | •063           | •062           | •064           | 001            |
| •900              | •096           | •079           | •068         | •069             | •039             | •099          | •082           | •076           | •079           | 020            |
|                   |                |                | $b_v = 0$    | 9.66             |                  | <u> </u>      | 2/0            | v =0.93        |                |                |
|                   |                |                |              |                  | Left             | side          |                |                | <del></del>    |                |
| •000              | 492            | •761           | .555         | •169             | 252              | •500          | •699           | •430           | •037           | 226            |
| •025<br>•075      | •334<br>•150   | 115            | -1.153       | -1.541           | -•702<br>- 400   | •137          | 234            |                | -1.374         | 497            |
| •150              | •026           | -•163<br>-•192 | 629<br>417   | -1.382<br>-1.234 | -•698<br>-•712   | 037<br>103    | 216<br>184     | 667<br>249     | -1.124<br>990  | -•479<br>-•517 |
| .250              | 061            | 204            | 313          | 634              | 650              | 063           | 130            | 241            | 611            | 513            |
| •350              | 127            | 226            | 273          | 226              | 624              |               | •              | •              | ****           | ****           |
| •450              | 164            | 230            | 247          | 189              | 583              |               |                |                |                |                |
| •550<br>•650      | 157<br>103     | 193            | 189          | 152              | 530              | - 47-         | - 645          | ***            |                |                |
| •750              | 103            | -•122<br>-•039 | 109<br>033   | -•091<br>-•027   | -•479<br>-•421   | 071           | -•065<br>-•022 | -•092<br>-•059 | 323<br>294     | -4404<br>-4378 |
| 850               | •032           | •034           | .038         | ●021             | 360              | 003           | •028           | -•028          | - 6253         | 346            |
| • 900             | ●054           | •061           | •069         | •065             | 330              | •020          | .053           | 012            | 205            | - 329          |
|                   |                |                |              |                  | Right            | side          |                |                |                |                |
| •025<br>•075      | -1.144<br>460  | -•100<br>-•172 | •370<br>•147 | •578<br>•346     | •711<br>•509     | -1.140<br>616 | 207<br>230     | -183<br>059    | •356           | • 482<br>• 223 |
| 150               | 373            | 170            | 045          | 212              | •353             | 217           | 187            | -•100          | •068<br>-•070  | •074           |
| • 250             | 311            | 204            | 051          | .087             | .213             | 1             | • - 0 1        | • 200          | •0.0           | •014           |
| • 350             | -•276          | 230            | 126          | 023              | •095             |               |                |                |                |                |
| 450               | -0234          | 219            | 157          | 075              | •008             |               |                |                |                |                |
| •550<br>•650      | -•178<br>-•101 | -•183<br>-•109 | 147<br>098   | 095              | 047              | 074           |                | - 010          | - 050          | 1.44           |
| •750              | 023            | -•109<br>-•029 | 035          | 065<br>021       | -•062<br>-•070   | 074           | -+055<br>-+025 | 060<br>049     | 058<br>056     | 100<br>139     |
| 850               | •070           | •062           | •056         | •060             | -1070<br>-1054   | •020          | •048           | •025           | •003           | 118            |
| 900               | •097           | .093           | .083         | •078             | 081              | 023           | •062           | •034           | •006           | 149            |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL  $TAIL\ - Continued$  (d)  $\alpha$  = 0°; M = 0.90

|              |                |                | Cp 1         | or-            |                       |                  |                | op for        |              |                    |
|--------------|----------------|----------------|--------------|----------------|-----------------------|------------------|----------------|---------------|--------------|--------------------|
| ¥            | B=-3.9°        | B=0°           | B=39°        | B=7.9°         | B=12.70               | B=-39°           |                | B=3.9°        |              | B=12.7             |
| <u>x</u>     | <u> </u>       | Z/             | by = 0.1     | /              |                       |                  | 2/             | $b_V = 0.3$   | 38           |                    |
| ٧            |                |                | <u> </u>     |                | Left s                | ide              |                |               |              |                    |
| •000         | •801           | •685           | •616<br>•495 | -•418<br>-•981 | •076                  | •578             | •792           | •664<br>-•931 | -1.300       | - • 200<br>- • 781 |
| •025<br>•075 | •278<br>•147   | 064<br>096     | 399          | 981<br>785     | -1.063<br>935         | •319<br>•140     | 086<br>153     | 677           | -1.182       | - 798              |
| •150         | .035           | 160            | 395          | 690            | 825                   | .043             | 172            | 427           | -1.085       | 776                |
| 250          | 006            | 129            | 274          | 548            | 691                   | 032              | 185            | 338           | 668          | 722                |
| • 350        | 046            | 147            | 232          | 362            | 585                   | 112              | 223            | 356           | - 492        | 679                |
| • 450        | 114            | 180            | 227          | 284            | ~.515                 | 181              | 259            | 290           | 281          | 62                 |
| •550         | 123            | 153            | 154          | 161            | 432                   | 168              | -•204<br>-•131 | 189<br>112    | 122<br>066   | 4559               |
| •650         | 087<br>038     | 088<br>026     | 076<br>010   | 082<br>020     | -•339<br>-•250        | 0118             | 036            | 030           | 004          | 41                 |
| 750<br>850   | •029           | •049           | •054         | •035           | -•159                 | +041             | •056           | •056          | •071         | - 33               |
| •900         | •064           | •085           | •086         | •069           | 100                   | •090             | .105           | •105          | .109         | - •28              |
|              |                |                |              |                | Right                 | side             |                |               |              |                    |
| •025         | 353            | •013           | •311         | +584           | .821                  | 899              | 049            | •334<br>•129  | •575<br>•340 | •745<br>•526       |
| •075         | 424            | 100<br>137     | •122<br>•038 | •343<br>•209   | •561<br>•391          | -•632<br>-•392   | 137<br>156     | •032          | •201         | •375               |
| •150<br>•250 | 362<br>262     | 126            | 008          | •136           | •281                  | 314              | -•190<br>-•180 | 046           | •092         | 24                 |
| •350         | 231            | -150           | 068          | •042           | •170                  | 311              | 215            | 117           | •000         | .13                |
| 450          | 208            | 177            | 128          | 040            | •060                  | 246              | 232            | 181           | 082          | •03                |
| •550         | 135            | 147            | 140          | 075            | •005                  | 176              | 193            | 183           | 115          | 03                 |
| •650         | 060            | 082            | 096          | 052            | 010                   | 091              | 117            | 131           | 090          | 05                 |
| •750         | •008           | 021            | 049          | 032            | 028                   | •000             | 016            | 042           | 032          | 05                 |
| •850<br>•900 | •075           | •060<br>•089   | •034<br>•055 | .041<br>.056   | •001<br><b>-•</b> 007 | •0.85            | •073<br>•094   | •051<br>•069  | .048<br>.060 | 035<br>06          |
| 8 900        | 1102           |                | $b_{V} = 0.$ |                |                       | 1                |                | v = 0.93      |              |                    |
|              |                |                | $D_V - O$ .  | .00            | Left                  | s ide            | -/-            | 0.55          | <del> </del> |                    |
| •000         | 6542           | 6777           | •614         | •271           | -•129                 | -5 70€<br>  •533 | •711           | •478          | •144         | 16                 |
| •025         | 329            | 123            | -1.045       | -1.385         | 677                   | •120             | 307            | 993           | -1.341       | 46                 |
| •075         | •147           | 174            | 883          | -1.255         | 681                   | 072              | 276            | 965           | -1.285       | 46                 |
| .150         | •020           | 208            | 481          | -1.165         | 696                   | 179              | 208            | 489           | -1.122       | 49                 |
| .250         | 075            | 232            | 414          | -1.109         | 629                   | 075              | -•142          | <b>-•179</b>  | 979          | 51                 |
| • 350        | <b>-•153</b>   | 259            | 287          | 676            | 610                   |                  |                |               |              |                    |
| •450         | 199            | 258            | 235          | 284            | ~.575                 |                  |                |               |              |                    |
| •550<br>•450 | 179<br>123     | 209<br>118     | 201<br>116   | 093<br>032     | 534<br>496            | 069              | 057            | 100           | 241          | 42                 |
| •650<br>•750 | 044            | 028            | -4031        | <b>-</b> €032  | -4456                 | 034              | 014            | 059           | 260          | - • 40             |
| •850         | 036            | •049           | •043         | 4048           | 404                   | 010              | •039           | 034           | 241          | 37                 |
| 900          | .063           | •078           | .081         | •069           | 380                   | •033             | •065           | 011           | 201          | 36                 |
|              |                |                |              |                | Righ                  | t side           |                |               |              |                    |
| .025         | -1.033         | 065            | •348         | •563           | •710                  | -1.068           | 199            | •152          | •337<br>•038 | •48                |
| .075         | 833            | 158            | •124         | •330           | •502                  | 915              | 270            | 116           |              | .22                |
| •150         | 366            | 165            | •024<br>021  | 199            | •352<br>•209          | 278              | 208            | -•202         | 124          | •06                |
| •250<br>•350 | -•390<br>-•239 | -+221<br>-+254 | 081<br>179   | •067<br>-•061  | •209<br>•084          | Į.               |                |               |              |                    |
| • 450        | 234            | 247            | 219          | 138            | 019                   | 1                |                |               |              |                    |
| •550         | 180            | 196            | 197          | 157            | 086                   | 1                |                |               |              |                    |
| •650         | 092            | 111            | 130          | 111            | 100                   | 063              | ~.048          | 070           | 084          | 13                 |
| •750         | 010            | 020            | 049          | 050            | 102                   | 040              | 013            | 057           | 073          | 17                 |
| .850         | •082           | •076           | •050         | •041           | 077                   | •031             | •065           | •021          | 006          | 14                 |
| •900         | •114           | •107           | •082         | •063           | 114                   | •037             | •077           | •034          | 011          | 18                 |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TAIL - Continued (e)  $\alpha$  = 0°; M = 0.92

|                  |  |                        | Cp             | for-             |                |                |                | Cp for                | r_               |                    |
|------------------|--|------------------------|----------------|------------------|----------------|----------------|----------------|-----------------------|------------------|--------------------|
| ٠,               | B=-3.9   | B=0°                   | B=39           | B=7.9            | B=12.70        | B=-3.9         | B=0°           | B=39                  | · B=7.9          | B=127°             |
| x C <sub>V</sub> | <del>′                                      </del> | Z/                     | by = 0.        | //               |                | <del></del>    |                | by = 0                | 38               | 1/                 |
| -v               |  |                        | - U.           | <i>,</i> ,       | Left s         | ide            |                | -, -                  |                  |                    |
|                  | <b></b>  |                        |                |                  |                | 1              |                |                       |                  |                    |
| 800              | .813<br>.272                                       | -:659                  | -:431          | -: 448<br>-: 928 | -1.031         | :399           | 081            | 916                   | -1:233           | -:160<br>-:733     |
| .075             | 140  | 101                    | ~.387          | 738              | 896            | •131           | 159            | 710                   | -1.125           | 746                |
| •150             | •028   | 167                    | 391            | 664              | 785            | •034           | 177            | 432                   | -1.034           | 735                |
| •250             | -•005<br>-•056                                     | 139<br>160             | 289<br>232     | 566<br>382       | 660<br>568     | 045<br>126     | 197<br>246     | 340<br>358            | 727<br>548       | 700<br>659         |
| •350<br>•450     | 127  | 204                    | 231            | 316              | 514            | 207            | 297            | 334                   | 415              | -4601              |
| •550             | 142  | 180                    | 150            | 175              | 440            | 196            | 230            | 176                   | 110              | 539                |
| .650             | 102  | 104                    | 066            | 073              | 358            | 135            | 133            | 098                   | 031              | 478                |
| •750<br>•850     | -•049<br>•023                                      | 031<br>.049            | •002<br>•064   | -•005<br>•050    | +•268<br>-•173 | 056<br>.036    | -•037<br>•057  | -•017<br>•068         | •023<br>•090     | 407<br>338         |
| 900              | 058  | •047                   | •096           | •085             | 111            | 085            | •104           | •110                  | •123             | 277                |
|                  |  |                        |                |                  | Right          | side           |                |                       |                  | <del></del>        |
| €025             | 335  | •005                   | •323           | •591             | •832           | 841            | 068            | •346                  | •583             | e754               |
| •075             | -+420  | 113                    | •135           | . 352            | •568           | 656            | 151            | •141                  | •348             | •539               |
| •150<br>•250     | 380<br>289   | 142<br>138             | •049<br>•002   | •221<br>•145     | •405<br>•290   | 432<br>326     | -•167<br>-•193 | •039<br><b>-</b> •046 | •215<br>•104     | •385<br>•256       |
| 350              | 246  | 168                    | 061            | •052             | •182           | 338            | 234            | 115                   | •009             | .150               |
| .450             | 225  | 198                    | 123            | 032              | •074           | 293            | 273            | 184                   | 081              | •037               |
| •550             | 144  | 176                    | 144            | 072              | •012           | 171            | 217            | 191                   | 118              | 029                |
| •650<br>•750     | 060  | <b>-</b> •097<br>-•026 | 095<br>041     | 054<br>028       | 008<br>028     | -•089<br>-•003 | -•122<br>-•014 | 131<br>033            | 094<br>024       | 056<br>053         |
| 850              | •074   | •055                   | .041           | •050             | 002            | 085            | •074           | •061                  | 059              | 039                |
| •900             | •097   | •087                   | .061           | •068             | 012            | •110           | •096           | •076                  | •075             | 064                |
|                  |  | 2/                     | by = 0         | .66              |                |                | Z/b            | v = 0.9.              | 3                |                    |
|                  |  |                        |                |                  | Left           | side           |                |                       |                  |                    |
| •000             | •559   | •778                   | •631           | .314             | 102            | +547           | •712           | ·498                  | •191             | -+140              |
| •025             | •317<br>•140                                       | -•120<br>-•177         | -1.022<br>877  | -1.312<br>-1.186 | -•677<br>-•677 | -090<br>-085   | -•297<br>-•306 | -•997<br>-•955        | -1.282<br>-1.224 | - • 488<br>- • 454 |
| 150              | •008   | 217                    | 674            | -1.112           | -•702          | 233            | -•308<br>-•258 | ~.740                 | -1.076           | 486                |
| •250             | 090  | 252                    | 399            | -1.072           | 616            | 122            | 151            | 199                   | 949              | 502                |
| •350             | 184  | 318                    | 404            | 962              | ~+594          |                |                |                       |                  |                    |
| .450<br>.550     | 238<br>203   | 292<br>231             | 186<br>176     | 371<br>064       | -∙565<br>-•525 |                |                |                       |                  |                    |
| 650              | 142  | 117                    | 104            | •002             | 494            | 074            | 059            | 094                   | 289              | 417                |
| .750             | 036  | 026                    | 020            | .038             | 456            | 041            | 009            | 057                   | -•269            | 397                |
| •850             | •034   | •050                   | •055           | •077             | 409            | •005           | •042           | 030                   | 237              | 371                |
| •900             | •061   | •082                   | •089           | •098             | -•379          | •027           | •071           | 012                   | 203              | 357                |
|                  |  |                        |                |                  | Right          |                |                |                       |                  |                    |
| ●025<br>●075     | 971<br>820   | 083<br>175             | •354<br>•134   | •571<br>•341     | •716<br>•510   | -1.013<br>914  | -•217<br>-•337 | 112                   | •348<br>•053     | •490<br>•230       |
| •150             | 543  | -•175<br>-•180         | .031           | •207             | •357           | 616            | -•252          | 223                   | 114              | •070               |
| ●250             | 393  | 247                    | 080            | .069             | •217           |                | •              |                       |                  | •                  |
| •350             | 376  | 321                    | 186            | 057              | •085           |                |                |                       |                  |                    |
| •450<br>•550     | -•193<br>-•173                                     | -•279<br>-•218         | -•232<br>-•201 | -•142<br>-•167   | -•015<br>-•083 |                |                |                       |                  |                    |
| •650             | 098  | -•109                  | 124            | 112              | 102            | 069            | 048            | 064                   | 068              | 122                |
| •750             | 016  | 022                    | 042            | ~.040            | 106            | 048            | 016            | 051                   | 057              | 168                |
| <b>●850</b>      | •081   | •078                   | •061           | •056             | -•077          | +027           | •065           | •033                  | •010             | 136                |
| •900             | •111   | •109                   | •089           | •085             | 105            | •028           | •083           | •043                  | •009             | -•177              |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TAIL - Continued (f)  $\alpha = 9^\circ$ ; M = 0.60

|                               |               |                | Cp fo        | or-          |               |              |                | p for -       | -             |                  |
|-------------------------------|---------------|----------------|--------------|--------------|---------------|--------------|----------------|---------------|---------------|------------------|
| x                             | B=-3.99       | B=00           | B=39°        | B=7.9°       | B=12.70       | B=-3.90      | B=0°           | B=3.9°        | B=7.9°        | B=127            |
| <del>x</del> - C <sub>v</sub> |               | 2/6            | v = 0.11     | ,            | <del></del>   |              | Z/1            | by = 0.3      | 8             |                  |
| V                             |               |                |              |              | Left s        | ide          |                |               |               |                  |
| •000                          | • • 19        | .828           | <b>•555</b>  | •172         | -1.068        | •075         | •650           | •007          | 980           | -1.806           |
| .025                          | 142           | 122            | 023          | 426          | 993           | •322         | 075            | 692           | -1.297        | -1.638<br>-2.051 |
| • 075                         | •001          | 118            | 155          | 389          | 694           | 159          | -•093<br>-•091 | 386<br>267    | -1.364<br>385 | -1.631           |
| •150                          | •014          | -•136<br>-•104 | 196<br>139   | 352<br>251   | 514<br>346    | .078<br>.017 | 095            | ~.219         | 294           | 391              |
| •250<br>•350                  | •012<br>-•013 | 104            | 139          | 207          | 285           | 029          | 120            | 208           | 271           | 35               |
| • 450                         | 035           | -•111          | 139          | 186          | 248           | 065          | 127            | 180           | 234           | 322              |
| •550                          | 047           | 104            | 119          | 151          | 210           | 054          | 093            | 139           | 179           | 259              |
| .650                          | 022           | 063            | 073          | 098          | 154           | 033          | 063            | 094           | 131           | 213              |
| .750                          | -•008         | 036            | 037          | 040          | 098           | 002          | 018            | 039           | 075           | 161              |
| .850                          | •023          | •009           | .014         | •024         | 007           | •044         | •053<br>•089   | .027<br>.059  | 001<br>.033   | 07°              |
| •900                          | •055          | •043           | •041         | •059         | •040          | •064         | *007           |               | •035          |                  |
|                               |               |                |              |              | Right         | side         |                |               |               | •624             |
| •025                          | •048          | 063            | 062          | •193         | •678          | 563<br>354   | •032<br>••034  | •370<br>•185  | •530<br>•348  | 48               |
| .075                          | 158<br>189    | 116<br>104     | •009<br>•030 | •172<br>•144 | •516<br>•390  | 262          | 052            | •096          | 223           | .360             |
| •150<br>•250                  | 149           | 084            | •027         | • 156        | •308          | 216          | 068            | .036          | .133          | .24              |
| 350                           | 146           | 093            | •000         | 121          | .217          | 192          | 084            | 005           | •075          | •17              |
| 450                           | 146           | 109            | 02B          | .080         | •152          | 173          | 093            | ~.041         | •024          | •10              |
| .550                          | 121           | 097            | 032          | • 052        | •115          | 140          | 082            | 043           | .003          | •06              |
| •650                          | 074           | 063            | 012          | •047         | •101          | 087          | 052            | 025           | •006<br>•029  | •05∘<br>•06      |
| •750                          | 042           | 027            | •007         | •052         | •096          | 029<br>.035  | •009<br>•068   | •011<br>•062  | •070          | •08              |
| •850<br>•900                  | •028<br>•046  | •023<br>•043   | .048<br>.064 | •091<br>•093 | •115<br>•119  | .062         | •091           | •071          | 073           | .06              |
|                               |               | 2/1            | by = 0.6     | 56           |               |              | Z/b            | -0.93         |               |                  |
|                               |               | -              |              |              | Left          | s ide        | <del>-</del>   |               |               |                  |
| •000                          | •028          | •582           | 059          | 736          | -1.248        | 4182         | •523           | 066           | 410           | 79               |
| .025                          | •297          | 122            | 886          | -1.057       | -1.000        | •143         | 204            | 731           | 629           | 60               |
| •075                          | •141          | 129            | 441          | -1.013       | 998           | 017          | 166            | 384           | 602           | - 459            |
| •150                          | •044          | 129            | 320          | 969          | -1.002        | 094          | -•132<br>-•070 | 235<br>149    | 551<br>458    | 57<br>54         |
| • 250                         | 020           | 122            | 242<br>217   | 713<br>338   | -1.026<br>923 | -+065        | 070            |               | -1496         | -104             |
| 4350<br>4450                  | 065<br>087    | 129<br>129     | 190          | 191          | 741           |              |                |               |               |                  |
| •550                          | 092           | 118            | 153          | 165          | 561           |              |                |               |               |                  |
| 650                           | 067           | 070            | 098          | 112          | 374           | 072          | 020            | 073           | 276           | 46               |
| .750                          | 026           | 009            | 034          | 050          | 208           | 035          | • 009          | 041           | 237           | 45               |
| •850                          | •010          | •028           | •014         | 003          | 110           | 006          | • 043          | 007           | 186<br>158    | 42<br>39         |
| • 900                         | •028          | •059           | •041         | •024         | -•065         | •010         | •064           | •009          |               | 39               |
|                               |               |                |              |              |               | t side       |                |               |               |                  |
| •025                          | -•671         | •000           | •354         | e 502        | •575          | 542<br>339   | 084<br>134     | •187<br>••007 | .278<br>.066  | •34<br>•15       |
| ●075<br>●150                  | 404<br>280    | 066<br>077     | •162<br>•073 | •322<br>•202 | •444<br>•318  | 221          | 122            | 089           | 059           | •00              |
| •250                          | 237           | 107            | •000         | •098         | •203          | ••••         | •              | •             |               |                  |
| • 350                         | 214           | 111            | 053          | •027         | •117          |              |                |               |               |                  |
| 450                           | 183           | 118            | 078          | 013          | •054          | 1            |                |               |               |                  |
| • 550                         | -+151         | 102            | 080          | 036          | •016          | 1            |                | . 0.00        |               |                  |
| •650                          | 097           | 066            | 055          | 027          | •000          | 031          | 020<br>.003    | 053<br>043    | 092<br>087    | 10               |
| • 750                         | 033           | 013<br>.06     | 018<br>.052  | 006<br>.043  | •009<br>•035  | 038<br>.010  | •055           | •016          | 036           | 11               |
| .850<br>.900                  | •030<br>•055  | •084           | •071         | •043         | •042          | •023         | •078           | •030          | C31           | 12               |
| . 900                         | 1 1095        |                |              | • • • • •    | #072          | 1            | 30.0           |               |               |                  |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION ()F THE FUSELAGE AND VERTICAL TAIL - Continued  $(g) \alpha = 9^{o}; \ M \approx 0.80$ 

|                   |              |                | Cp 1           | or-            |                |              |                | Cp for       | -                |                  |
|-------------------|--------------|----------------|----------------|----------------|----------------|--------------|----------------|--------------|------------------|------------------|
| l x               | B=-3.94      | B=0°           | B=3.9°         | B=7.90         | B=12.70        | B=-3.9°      | B=0°           | B=3.9°       | B=7.9°           | B=12.7°          |
| $\frac{x}{C_{v}}$ |              |                | by = 0.1       |                |                |              | Z/             | $b_V = 0.3$  | 38               |                  |
|                   |              |                |                |                | Left s         | ide          |                |              |                  |                  |
| •000              | •426         | .880           | •576           | e331           | 502            | •302         | •676           | .270         | 358              | -1.146           |
| ●025              | 178          | 123            | •050           | 338            | 729            | •314         | 074<br>098     | 804<br>407   | -1.303<br>-1.248 | -1.475<br>-1.475 |
| •075              | 008          | 126<br>152     | -•127<br>-•218 | -•381<br>-•399 | -•674<br>-•606 | •155<br>•077 | 095            | 272          | 607              | -1.295           |
| •150<br>•250      | •010<br>•011 | -•132<br>-•118 | 157            | 286            | 379            | .016         | 109            | 227          | 306              | 808              |
| 350               | 016          | 109            | 151            | 228            | 323            | 036          | 139            | -4220        | 283              | 521              |
| .450              | 050          | 127            | 156            | <b>-</b> ↓203  | 300            | 074          | 150            | 195          | 245              | 417              |
| a550              | 060          | 129            | 137            | 163            | -•251<br>-•184 | 065<br>045   | -•115<br>-•071 | 145<br>087   | 189<br>136       | 338<br>272       |
| •650              | 033          | -•071<br>-•043 | -•078<br>-•031 | -•101<br>-•039 | 120            | 008          | 019            | 026          | 067              | - 193            |
| •750<br>•850      | •033         | •010           | •027           | 034            | 020            | •057         | 058            | .049         | .013             | 076              |
| 900               | .062         | •042           | .064           | .077           | .044           | •086         | • 096          | •088         | •053             | 017              |
|                   |              |                |                |                | Right          | side         |                |              |                  |                  |
| •025              | •128         | 063            | 084            | .180           | •530           | 657          | •021           | •384         | •540             | •639<br>•499     |
| •075              | 137          | 133            | .013           | .180           | • 495          | 349<br>262   | 940<br>060     | •193<br>•110 | •351<br>•238     | 374              |
| •150              | 200          | 118            | •045<br>•039   | •143<br>•135   | •411<br>•333   | 219          | 083            | .049         | •152             | .266             |
| •250<br>•350      | 158<br>161   | 097<br>101     | •007           | •111           | • 236          | 203          | 103            | 004          | .085             | •190             |
| 450               | 163          | 120            | 026            | .076           | .160           | 192          | 118            | 043          | .023             | •110             |
| .550              | 137          | 115            | 034            | •053           | •117           | 148          | 101            | 051          | 001              | •069             |
| •650              | 080          | 069            | 012            | •053           | •099           | 085          | 063            | 025<br>.018  | •005<br>•033     | •055<br>•061     |
| a750              | 036          | 039            | •009           | •053<br>•095   | •091<br>•119   | 016<br>.060  | •007<br>•079   | •081         | •080             | •084             |
| 900               | •033         | •024<br>•042   | •064<br>•082   | •095           | •120           | 088          | •090           | 093          | •083             | •072             |
| 1,500             |              |                | by = 0.        |                |                | 1            | Z/b            | v = 0.93     |                  |                  |
|                   | <u></u>      |                |                |                | Left           | s ide        |                |              |                  |                  |
| •000              | •229         | •601           | .178           | 364            | 913            | •273         | •531           | •120         | 245              | 770              |
| 025               | 290          | 127            | 936            | -1.006         | 881            | •131         | 242            | 698          | 571              | 577              |
| 075               | 137          | 135            | 549            | 983            | 906            | 037          | 213            | 537          | 543              | 578              |
| .150              | •041         | 147            | 331            | 977            | 871            | - 114        | 155            | 302          | 503              | - 572            |
| • 250             | 028          | 146            | 261            | 851            | 837            | 065          | 088            | -+169        | -•431            | - 4542           |
| •350              | 071<br>103   | 152<br>158     | -•223<br>-•192 | 548<br>182     | -•793<br>-•717 | 1            |                |              |                  |                  |
| • 450<br>• 550    | 109          | 139            | 153            | 136            | 613            |              |                |              |                  |                  |
| .650              | 070          | 080            | 083            | 099            | 481            | 054          | 011            | 051          | 306              | 414              |
| •750              | 019          | 008            | 015            | 039            | 344            | 015          | •027           | 017          | 275              | 396              |
| •850              | •033         | •042           | •042           | •017           | 225            | €024<br>●047 | •067<br>•085   | •023<br>•041 | 231<br>197       | 368<br>356       |
| •900              | •056         | •073           | •073           | •050           | 167            | t side       | •005           |              | - 4721           |                  |
|                   | -            |                |                |                |                | 7.722        | 110            | •186         | •310             | •384             |
| •025              | 810<br>418   | 004<br>078     | •355<br>•170   | •515<br>•331   | •588<br>•466   | 386          | 179            | 029          | •091             | 202              |
| •075<br>•150      | 279          | 088            | .084           | 215            | •339           | 215          | -1147          | 113          | 055              | .018             |
| •250              | 248          | 124            | .004           | •115           | • 222          |              |                |              |                  | i                |
| •350              | 226          | 139            | 055            | •031           | •123           | 1            |                |              |                  |                  |
| •450              | 187          | 146            | 083            | 018            | •056           | ļ            |                |              |                  |                  |
| •550              | 146          | 120<br>078     | 078<br>047     | 044<br>035     | •011<br>•005   | 024          | 013            | 034          | 070              | 113              |
| €650<br>€750      | 018          | •006           | 003            | •002           | 001            | 010          | •015           | 022          | 078              | 137              |
| 850               | .067         | .079           | 070            | •065           | •024           | •050         | •080           | •042         | 032              | 119              |
| 900               | •091         | •100           | •090           | •083           | •017           | •067         | •096           | •058         | 026              | 140              |
| <u> </u>          |              |                |                |                |                |              |                |              |                  |                  |

TABLE VII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TALL - Continued  $(h) \ \alpha = 9^{O}; \ M = 0.85$ 

|                      |              |                | Cp                 | for-           |   |                |              | Cp for         | _             |              |
|----------------------|--------------|----------------|--------------------|----------------|---|----------------|--------------|----------------|---------------|--------------|
| X                    | B=-3.9       | B=0°           | B=3.9              | B=7.9°         | B=12.7°   | B=-3.90        | B=0°         | B=3.9°         | B=7.9°        | B=127        |
| $\frac{x}{C_{\vee}}$ |              | Z              | by = 0.            | //             |   |                | Z/           | by = 0.        | 38            |              |
| <b>-v</b>            | -            |                | 0,0                |                | Left s  | ide            |              |                |               |              |
| •000                 | •442         | •892           | •583               | •367           | 428   | •329           | •677         | •338           | 212           | 920          |
| .025                 | 176          | 130            | •071               | 300            | 612   | .322           | 074          | 821            | -1.270        | -1.435       |
| •075                 | 009          | 127            | 122                | 372            | 621   | 164            | 103          | 435            | -1.110        | -1.295       |
| • 150                | •016         | 153            | 239                | ~•432          | 637   | •081           | 098          | 283            | 683           | -1.140       |
| •250<br>•350         | -016<br>-019 | 123<br>114     | 172<br>167         | 314<br>254     | ~•408<br>-•328                                    | 044            | 113<br>150   | -•247<br>-•240 | 380<br>311    | 867<br>585   |
| 450                  | 054          | 140            | 176                | 222            | 332   | 084            | 163          | 216            | 270           | - 469        |
| •550                 | -4063        | 140            | 155                | 181            | 283   | 077            | 126          | 156            | 212           | 385          |
| .650                 | 040          | 083            | 088                | 113            | 216   | 054            | 084          | 098            | 149           | 323          |
| <b>◆750</b>          | 013          | 051            | 038                | 050            | 143   | 013            | 024          | 031            | 076           | 242          |
| •850                 | •034         | •007           | •024               | •032           | 053   | •057           | •056         | •051           | •012          | 115          |
| • 900                | •064         | •044           | •059               | •075           | •021  | •090           | •099         | •095           | •058          | 047          |
|                      | <u></u>      |                |                    |                | Right   | side           |              |                |               |              |
| ●025<br>●075         | -143<br>-135 | 058<br>141     | 107<br>001         | •166<br>•170   | • 451<br>• 466                                    | -•791<br>-•371 | 001<br>063   | •375<br>•192   | •534<br>•345  | •647<br>•502 |
| •150                 | 216          | 126            | •038               | 134            | • <del>• • • • • • • • • • • • • • • • • • </del> | 280            | -•074        | 103            | •235          | •379         |
| •250                 | 170          | 108            | 034                | 126            | ±340  | 235            | 094          | •041           | .154          | 269          |
| .350                 | 177          | 114            | 001                | 101            | • 242   | 218            | 116          | 009            | •078          | .193         |
| .450                 | 175          | 131            | 041                | .067           | •162  | 200            | 134          | 059            | •012          | •109         |
| •550                 | 143          | 126            | 046                | ●047           | .117  | 150            | 118          | 065            | 014           | •061         |
| •650                 | 084          | 080            | 028                | +042           | •097  | 087            | -•076        | 039            | 005           | +044         |
| •750                 | ~•039        | 047            | •001               | +044           | .084  | 013            | •002         | *011<br>*079   | •026          | •050<br>•071 |
| ∙850<br>•900         | •034         | ∎022<br>∎046   | •055<br>•075       | .087<br>.094   | •109<br>•107                                      | •061<br>•096   | •079<br>•090 | •091           | •077<br>•081  | •057         |
|                      |              | 2/             | b <sub>v</sub> = 0 | .66            |   |                | Z/b          | y = 0.93       | •             |              |
|                      |              |                | <u></u>            |                | Left  | side           |              | ·              |               |              |
| •000                 | •247         | •599           | +240               | 285            | 804   | •280           | •530         | •143           | 245           | 704          |
| .025                 | •296         | 123            | 962                | -1.136         | 847   | .127           | 227          | 783            | 626           | -+569        |
| •075                 | •147         | 137            | 619                | -1:107         | ~.841   | 040            | 238          | 595            | 599           | 568          |
| •150                 | €046         | 151            | 351                | -1.038         | 806   | 136            | 168          | 321            | 566           | -+567        |
| • 250                | 026          | 157            | 274                | 813            | 767   | 074            | <b>~•097</b> | 167            | <b>~•48</b> 5 | 552          |
| • 350                | 080          | ~•166          | ~•231              | 426            | 737   | 1              |              |                |               |              |
| •450<br>•550         | 116          | -•170<br>-•148 | 200<br>156         | -•202<br>-•175 | -•681<br>-•607                                    |                |              |                |               |              |
| •650                 | 076          | 088            | 086                | 110            | 515   | 052            | 017          | <b>~</b> •052  | 317           | 432          |
| •750                 | 017          | 011            | 016                | 037            | 408   | 012            | •022         | 012            | 272           | 402          |
| .850                 | •037         | .044           | .048               | .025           | 303   | .036           | •067         | .031           | 215           | 365          |
| • 900                | •067         | •076           | .081               | •057           | 248   | ●054           | •089         | •049           | 175           | 351          |
|                      |              | •              |                    |                | Right   | side           |              |                |               |              |
| •025                 | 903          | 023            | •353               | •509           | •591  | 844            | 133          | •182           | •315          | •392         |
| •075<br>•150         | 485<br>296   | -•097<br>-•103 | •166<br>•079       | •328           | •463<br>•338                                      | 472            | 208<br>168   | 043<br>137     | •087<br>-•084 | •206<br>•011 |
| •250                 | 263          | 138            | 008                | •213<br>•104   | • 225   | - 1220         | -1100        | -0121          |               | *011         |
| • 350                | 235          | -•156          | 068                | 019            | •123  | 1              |              |                |               |              |
| 450                  | 193          | 160            | 099                | 038            | .046  | 1              |              |                |               |              |
| 550                  | 149          | 131            | 096                | 063            | •000  | 1              |              |                |               |              |
| .650                 | 079          | 083            | 059                | 045            | 019   | 034            | 016          | 036            | 081           | 126          |
| •750                 | 012          | •013           | 011                | 012            | 027   | 007            | •016         | 019            | 083           | 157          |
| <b>850</b>           | •073         | •082           | •071               | •055           | 003   | •056           | •084         | .048<br>.045   | 027           | 139          |
| •900                 | •104         | •109           | •095               | •074           | 014   | •074           | •099         | •065           | 018           | 157          |

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TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL  $TAIL\ - Continued$  (i)  $\alpha=9^{\circ};\ M=0.90$ 

|  |  |  | Cp 1   | or-  | -   |  | -   | Cp for.   | _                                     |                                    |
|--|--|--|--|--|---|--|---|---|---------------------------------------|------------------------------------|
| X  | B=-3.99  | B=0°   | B=39°  | B=7.9°   | B=12.70   | B=-3.9"  | B=0°                                      | B=3.9°  | B=7.9°                                | B=127                              |
| <u>x</u><br>C <sub>v</sub>   |  | Z/   | by = 0.1   | /  |   |  | Z/  | by = 0.3  | 8                                     |                                    |
| •  |  |  |  |  | Left s  | ide  |   |   |                                       |                                    |
| •000<br>•025   | •462<br>-•189  | •918<br>-•123  | •602<br>•104   | •408<br>-•230  | 211<br>493  | •391<br>•321   | -691<br>-071                              | -1.007  | 056<br>-1.368                         | -1.32                              |
| .075   | 005  | 125  | 106  | 315  | 560   | •169   | 106                                       | - 429   | 890                                   | -1.18                              |
| .150   | •020   | 157  | 259  | 446  | 627   | •086   | 109                                       | 322   | 671                                   | -1.05                              |
| • 250  | •017   | 129  | 191  | 357  | ~.516   | •023   | 125                                       | 270   | 518                                   | 86                                 |
| •350   | 016  | 123  | 188<br>200   | ~.296  | 351   | 044<br>092   | 162<br>191                                | 272<br>242                                      | 357<br>309                            | -+61                               |
| •450<br>•550   | -+054<br>-+067   | 154<br>157   | 177  | 254<br>197   | 358<br>335  | 087  | 147                                       | 168   | 238                                   | 50<br>43                           |
| 650  | 043  | 093  | 098  | 121  | 263   | 064  | 094                                       | 101   | 155                                   | - 38                               |
| .750   | 012  | 053  | 043  | 047  | 192   | 015  | 021                                       | 027   | 071                                   | 31                                 |
| .850   | •041   | •009   | •022   | •037   | 107   | ●063   | •067                                      | •055  | •021                                  | 18                                 |
| 900  | •074   | •049   | •061   | •088   | 041   | •098   | +113                                      | •102  | •070                                  | -,11                               |
|  |  |  |  |  | Right   | side   |   |   |                                       |                                    |
| 025<br>075   | •174<br>-•112  | 050<br>143   | 117<br>007   | •151<br>•163   | • <b>29</b> 2<br>• <b>39</b> 8  | 842<br>372   | •005<br>•062                              | •374<br>•190                                    | •531<br>•349                          | #64                                |
| 150  | 226  | 127  | 035  | 141  | 395   | 296  | 077                                       | 103   | .238                                  | -36                                |
| 250  | 181  | 111  | .029   | .119   | .331  | 246  | 098                                       | .037  | .149                                  | .25                                |
| • 350  | 190  | 119  | 007  | •091   | •230  | 242  | 129                                       | 015   | •080                                  | •17                                |
| .450   | 190  | 141  | 046  | •058   | •143  | 220  | 151                                       | 069   | •001                                  | .08                                |
| 4550   | 158  | 138  | 058  | •033   | •089  | 159  | 134                                       | 081   | 029                                   | •03                                |
| •650   | 086  | 087  | 037  | •032   | •063  | 088  | 085                                       | 051   | 025                                   | •00                                |
| •750<br>•850   | 036  | 050<br>.025  | 010<br>.055  | •036<br>•083   | •042<br>•070  | 007  | •001<br>•087                              | .005<br>.079                                    | •015<br>•071                          | •01                                |
| •900   | •067   | •051   | •076   | •095   | •067  | 108  | •106                                      | 092   | .083                                  | •01                                |
|  |  | Z/   | by = 0.  | 66   |   | †  | Z/b                                       | y = 0.93  |                                       |                                    |
|  |  |  |  |  | Left  | side   |   |   |                                       |                                    |
| .000   | • 293  | 6514   | • 305  | 154  | 669   | •301   | •537                                      | e174  | 257                                   | 62                                 |
| •025   | a 294  | 122  | -1.059   | -1.412   | 831   | .138   | 271                                       | -1.054  | 817                                   | 58                                 |
| •075   | •143   | -1146  | 610  | -1.249   | 805   | 047  | 279                                       | ~.688   | 743                                   | 56                                 |
| 150  | +044   | 163  | 384  | 951  | 767<br>707  | 185  | 185                                       | 329   | 671                                   | 56                                 |
| • 250<br>• 350   | 029<br>094   | 177<br>198   | 333<br>247   | -:699<br>-:426   | ~•727<br>~•696  | 075  | 098                                       | 122   | -,596                                 | - • 56                             |
| •450   | 137  | 194  | 208  | - 289  | -•654   | 1  |   |   |                                       |                                    |
|  | 138  | 165  | 165  | 195  | 599   | 1  |   |   |                                       |                                    |
| <b>a</b> 550   |  |  |  | 1.4  | 649   |  | - 411                                     | 053   | 276                                   | 46                                 |
| .650   | 083  | 091  | 087  | 107  | 542   | 044  | 011                                       |   |                                       | 44                                 |
| •650<br>•750   | 016  | 001  | 011  | 027  | 470   | 004  | •035                                      | 008   | - 205                                 |                                    |
| •650<br>•750<br>•850   | 016<br>.044  | 001<br>.059  | 011<br>.053  | -•027<br>•039  | 470<br>385  | 004<br>.041  | •035<br>•085                              | -•008<br>•035                                   | 142                                   | 40                                 |
| •650<br>•750   | 016  | 001  | 011  | 027  | 470<br>385<br>335   | 004<br>.041<br>.068  | •035                                      | 008   |                                       | 40                                 |
| .650<br>.750<br>.850<br>.900   | 016<br>•044<br>•075  | 001<br>.059<br>.089  | 011<br>.053<br>.089  | 027<br>.039<br>.072  | 470<br>385<br>335   | 004<br>.041<br>.068  | •035<br>•085<br>•102                      | 008<br>.035<br>.061                             | 142<br>102                            | 40<br>38                           |
| •650<br>•750<br>•850<br>•900   | 016<br>.044  | 001<br>.059  | 011<br>.053<br>.089  | 027<br>.039<br>.072  | 470<br>385<br>335   | 004<br>.041<br>.068  | •035<br>•085<br>•102                      | -•008<br>•035                                   | 142                                   | 40                                 |
| .650<br>.750<br>.850<br>.900   | 016<br>-044<br>-075  | 001<br>.059<br>.089  | 011<br>.053  | -•027<br>•039  | 470<br>385<br>335<br>335  | 004<br>.041<br>.068<br><i>side</i>                           | •035<br>•085                              | 008<br>.035<br>.061                             | -142<br>-102                          | 40<br>38                           |
| •650<br>•750<br>•850<br>•900<br>•025<br>•075<br>•150<br>•250                                 | 016<br>-044<br>-075<br>-1012<br>465<br>325<br>308                                    | 001<br>-059<br>-089<br>023<br>097<br>107<br>154                      | 011<br>.053<br>.089<br>.346<br>.159<br>.073<br>015                                   | 027<br>.039<br>.072<br>.502<br>.323<br>.211<br>.102                            | 470<br>385<br>335<br><i>Right</i><br>.591<br>.450<br>.327<br>.209                 | 004<br>.041<br>.068<br>-1.050<br>561                         | -035<br>-085<br>-102                      | 008<br>.035<br>.061                             | 142<br>102                            | -•40<br>-•38                       |
| .650<br>.750<br>.850<br>.900   | 016<br>-044<br>-075<br>1-012<br>465<br>325<br>308<br>245                             | 001<br>-059<br>-089<br>023<br>097<br>107<br>154<br>181               | 011<br>-053<br>-089<br>-346<br>-159<br>-073<br>015<br>085                            | 027<br>-039<br>-072<br>-502<br>-323<br>-211<br>-102<br>-008                    | 470<br>385<br>335<br>335<br>591<br>.450<br>.327<br>.209<br>.101                   | 004<br>.041<br>.068<br>-1.050<br>561                         | -035<br>-085<br>-102                      | 008<br>.035<br>.061                             | 142<br>102                            | 40<br>38                           |
| .650<br>.750<br>.850<br>.900   | 016<br>-044<br>-075<br>-1012<br>465<br>325<br>308<br>245<br>201                      | 001<br>-059<br>-089<br>023<br>097<br>107<br>154<br>181<br>179        | -011<br>.053<br>.089<br>.346<br>.159<br>.073<br>-015<br>-085                         | -027<br>039<br>072<br>-502<br>323<br>-211<br>102<br>008<br>-059                | 470<br>385<br>335<br>Right<br>.591<br>.450<br>.327<br>.209<br>.101                | 004<br>.041<br>.068<br>-1.050<br>561                         | -035<br>-085<br>-102                      | 008<br>.035<br>.061                             | 142<br>102                            | 40<br>38                           |
| .650<br>.750<br>.850<br>.900<br>.025<br>.075<br>.150<br>.250<br>.350<br>.450                 | 016<br>-044<br>-075<br>-1012<br>465<br>325<br>308<br>245<br>201<br>151               | 001<br>-059<br>-089<br>023<br>097<br>107<br>154<br>179<br>146        | -011<br>.053<br>.089<br>.089<br>.073<br>-015<br>-085<br>-128<br>-120                 | -027<br>039<br>072<br>-502<br>323<br>-211<br>102<br>-008<br>-059<br>-087       | 470<br>385<br>335<br>Right<br>.591<br>.450<br>.327<br>.209<br>.101<br>.014<br>046 | 004<br>.041<br>.068<br>f <i>Side</i><br>-1.050<br>561<br>206 | -035<br>-085<br>-102<br>146<br>257<br>187 | -•008<br>•035<br>•061<br>-177<br>-•057<br>-•208 | •320<br>•320<br>•094<br>•115          | -•40<br>-•38<br>-39<br>•19<br>-•01 |
| .650<br>.750<br>.850<br>.900<br>.900<br>.025<br>.075<br>.150<br>.250<br>.350<br>.450<br>.550 | 016<br>-044<br>-075<br>16012<br>465<br>325<br>325<br>208<br>245<br>201<br>151<br>076 | 001<br>-059<br>-089<br>097<br>107<br>154<br>181<br>179<br>146<br>103 | -011<br>.053<br>.089<br>-346<br>.159<br>.073<br>-015<br>-085<br>-128<br>-120<br>-071 | -027<br>039<br>072<br>-502<br>323<br>211<br>102<br>008<br>-059<br>-087<br>-062 | 470<br>385<br>335<br>Right<br>.591<br>.450<br>.327<br>.209<br>.101<br>.014<br>046 | 004<br>.041<br>.068<br>* <i>side</i><br>-1.050<br>561<br>206 | -035<br>-085<br>-102<br>146<br>257<br>187 | 008<br>.035<br>.061<br>057<br>208               | -1142<br>-102<br>-320<br>-094<br>-115 | -•40<br>-•38<br>•39<br>•19<br>-•01 |
| .650<br>.750<br>.850<br>.900<br>.025<br>.075<br>.150<br>.250<br>.350<br>.450                 | 016<br>-044<br>-075<br>-1012<br>465<br>325<br>308<br>245<br>201<br>151               | 001<br>-059<br>-089<br>023<br>097<br>107<br>154<br>179<br>146        | -011<br>.053<br>.089<br>.089<br>.073<br>-015<br>-085<br>-128<br>-120                 | -027<br>039<br>072<br>-502<br>323<br>-211<br>102<br>-008<br>-059<br>-087       | 470<br>385<br>335<br>Right<br>.591<br>.450<br>.327<br>.209<br>.101<br>.014<br>046 | 004<br>.041<br>.068<br>f <i>Side</i><br>-1.050<br>561<br>206 | -035<br>-085<br>-102<br>146<br>257<br>187 | -•008<br>•035<br>•061<br>-177<br>-•057<br>-•208 | •320<br>•320<br>•094<br>•115          | -•40<br>-•38                       |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TAIL - Continued (j)  $\alpha = 9^{\circ}$ ; M = 0.92

|                     |                |                | Cp                                    | for-          |                |                |                | Co for         |   |                |
|---------------------|----------------|----------------|---------------------------------------|---------------|----------------|----------------|----------------|----------------|---|----------------|
|                     | B=-3.9°        | R-00           |                                       | B=7.9°        | B=12.7°        | B=-3.9°        |                | <del></del>    |   | 10:            |
| X<br>C <sub>V</sub> | 0 3.9          | /              | 1′                                    | 1             | 13=12.70       | 13 = - 3.90    | ·              | B=3.9°         | B=7.9°                                  | B=127°         |
| C <sub>V</sub>      |                | 2/             | bv = 0.1                              | /             |                | L              | Z/             | $b_V = 0.3$    | <i>38</i>                               |                |
|                     |                |                |                                       |               | Left s         | ide            |                |                |   |                |
| •000                | •468           | .919           | •605                                  | .414          | 064<br>419     | •406<br>•316   | •687           | .439           | 007                                     | -+617          |
| ●025<br>●075        | -•196<br>-•019 | 134<br>132     | •109<br>-•102                         | 208<br>294    |                |                | 069<br>112     | 985<br>445     | -1.325                                  | -1.189         |
| 150                 | 012            | 163            | 272                                   | 426           | 500<br>573     | •159<br>•079   | 117            | 341            | -•865<br>-•675                          | -1.107<br>988  |
| • 250               | •010           | 137            | 205                                   | 382           | 543            | •013           | 136            | 288            | 539                                     | 839            |
| • 350               | -+024          | 136            | 207                                   | <b>-</b> •325 | 396            | 060            | 180            | 304            | 394                                     | 627            |
| • 450               | -+064          | 172            | 230                                   | 281           | 360            | 109            | 219            | 284            | 330                                     | 515            |
| •550<br>•650        | 081<br>054     | 180<br>108     | 204<br>110                            | 214<br>130    | -•353<br>-•286 | -•105<br>-•078 | 171<br>112     | 182<br>113     | 255<br>166                              | 457<br>413     |
| 750                 | -0025          | 062            | 053                                   | 050           | 218            | 025            | 030            | 033            | 075                                     | 346            |
| 850                 | •031           | •003           | .018                                  | •038          | 132            | .052           | •063           | •050           | •021                                    | 231            |
| ●900                | .066           | ●045           | •055                                  | •086          | 066            | •095           | •105           | •097           | •072                                    | 149            |
|                     |                |                |                                       |               | Right          | side           |                |                |   |                |
| •025                | •178           | 051            | 136                                   | •145          | •230           | 843            | 037            | •360           | •534                                    | •653           |
| •075<br>•150        | -e116<br>-e243 | 151<br>142     | 020<br>.025                           | •160<br>•139  | •364<br>•398   | 392<br>306     | -•086<br>-•096 | •176<br>•087   | •349<br>•237                            | •497<br>•373   |
| 250                 | 193            | ~•174<br>~•128 | .019                                  | 119           | •343           | - 256          | 120            | •022           | •150                                    | 263            |
| • 350               | 207            | 134            | 019                                   | •093          | .238           | 262            | 150            | 029            | •076                                    | •181           |
| • 450               | -•206          | 159            | 064                                   | •051          | .147           | 244            | 180            | 090            | 004                                     | •083           |
| •550                | 177            | 162            | 077                                   | •024          | •088           | 168            | 163            | 103            | 036                                     | •025           |
| •650<br>•750        | -•098<br>-•045 | 104<br>061     | 053<br>024                            | ∙026<br>•028  | •057<br>•033   | 095<br>011     | -•103<br>-•005 | 073<br>011     | 036<br>.003                             | 002<br>005     |
| 850                 | •035           | •020           | 039                                   | •080          | •057           | 074            | •081           | •057           | •068                                    | •012           |
| 900                 | .064           | .046           | .066                                  | •091          | •057           | .106           | •102           | •085           | .082                                    | 001            |
|                     |                | 2/             | $b_{\nu} = 0.$                        | 66            |                |                | Z/b            | -0.93          |   |                |
|                     |                |                | <del></del>                           | <del></del>   | Left           | s ide          | <u>.</u>       |                | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                |
| •000                | <b>+308</b>    | +607           | •327                                  | 104           | 609            | •312           | •530           | .199           | 203                                     | 603            |
| •025                | 4286           | 124            | -1.076                                | -1.280        | 802            | .126           | 243            | -1.045         | 784                                     | 541            |
| •075                | •141           | 150            | 635                                   | -1.109        | 764            | 049            | 262            | 953            | 728                                     | 539            |
| •150<br>•250        | •034<br>•041   | -•170<br>-•193 | 404<br>371                            | 982<br>747    | 721<br>691     | -•260<br>-•076 | -•273<br>-•065 | -•372<br>-•101 | -:668<br>-:602                          | 543<br>541     |
| 350                 | -6114          | 235            | - 328                                 | 525           | -4661          |                | - \$000        | -0101          | -1002                                   | 8741           |
| +450                | ~.159          | 219            | 201                                   | 357           | 627            |                |                |                |   |                |
| •550                | 159            | 185            | 171                                   | 234           | 584            |                |                |                |   |                |
| •650<br>•750        | -•097<br>-•021 | 096            | 093                                   | 120           | 538<br>493     | 052            | 015<br>.033    | -:056<br>-:010 | 293                                     | - 471          |
| • 750<br>• 850      | -0021<br>•042  | 005<br>.055    | 012<br>.052                           | -•024<br>•039 | 483<br>411     | 006<br>.042    | •074           | 010<br>.037    | 217<br>147                              | 447<br>413     |
| 900                 | •074           | •093           | .091                                  | •074          | 376            | .066           | 101            | •060           | 115                                     | - 392          |
|                     |                |                | · · · · · · · · · · · · · · · · · · · |               | Right          |                |                |                |   |                |
| •025                | -1.040         | 062            | •329                                  | •500          | •597           | -1.085         | <b>~•</b> 185  | .156           | •321                                    | •406           |
| •075                | 432            | 126            | 145                                   | .324          | <b>+458</b>    | 655            | -•296          | 068            | •091                                    | •214           |
| a150                | ~.333          | 130            | •062                                  | •210          | •338<br>336    | 252            | 245            | 276            | 128                                     | 009            |
| •250<br>•350        | -•338<br>-•289 | -•176<br>-•219 | 032<br>113                            | •097<br>•002  | •215<br>•105   |                |                |                |   |                |
| 450                 | -•201          | -•219<br>-•206 | 163                                   | 067           | •015           |                |                |                |   |                |
| .550                | 156            | 164            | 143                                   | 102           | 052            |                |                |                |   |                |
| •650                | 077            | 113            | 085                                   | 073           | 075            | 041            | 014            | 043            | 083                                     | 167            |
| .750<br>.850        | -±003          | •016<br>•093   | 021                                   | 027           | 088            | 002            | •027           | 018<br>.055    | =•086<br>=•020                          | 217            |
| 900                 | •116           | •122           | •067<br>•097                          | •053<br>•076  | 066<br>081     | •068<br>•089   | •095<br>•114   | ⊕055<br>⊕072   | 020                                     | -•206<br>-•210 |
|                     |                | 7.4.6          |                                       |               | 1001           | •007           | ₩ 1 1 →        | *****          |   | - 1210         |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL TAIL - Continued

(k)  $\alpha = 15.1^{\circ}$ ; M = 0.60

| Γ                | 1              |                | Cp                     | for-         |                | <del></del>    |                | Cp for                                  | <del></del>      |                  |
|------------------|----------------|----------------|------------------------|--------------|----------------|----------------|----------------|---|------------------|------------------|
|                  | B=-3.94        | B=0°           |                        | B=7.9°       | B=12.7°        | B=-3.9°        |                | B=3.9°                                  | B=7.9°           | B=127°           |
| X C <sub>V</sub> | D = 3.9        |                | 1'                     |              | D-12.1         | <i>D</i> = 5.3 | <u>'</u>       | 17 -                                    | 17               | 12.1             |
| ٧-               |                | - 4/           | by = 0.1               | ',           |                | L              |                | $b_V = 0.3$                             | 00               |                  |
|                  |                |                |                        |              | Left s         | ide            |                | - · · · · · · · · · · · · · · · · · · · | <del></del>      |                  |
| .000<br>.025     | -389<br>507    | 843<br>260     | •692<br>•165           | 631<br>025   | 431            | 304<br>-375    | • 763<br>• 022 | 161<br>627                              | -1:557<br>-2:592 | -2.147<br>-2.154 |
| 075              | 195            | 216            | 051                    | 166          | 440            | 230            | ~•033          | 393                                     | 585              | -2.343           |
| .150             | 077            | 205            | 21B                    | 263          | 445            | .154           | 046            | 280                                     | 485              | 595              |
| • 250            | 010            | 166            | 202                    | 205          | 315            | 4804           | -•062          | 234                                     | 407              | 512              |
| • 350            | -•027          | -+131          | 207                    | 189          | -•246          | •024           | 099            | 218                                     | 367              | 493              |
| •450<br>•550     | 050            | -•157<br>-•145 | ~•216<br><b>-•</b> 195 | 194          | 209            | 003            | 111            | 202                                     | 342              | 452              |
| 650              | 066            | -•145<br>-•115 | -4152                  | 161<br>119   | -•158<br>-•098 | 006<br>100     | 085<br>062     | 166<br>127                              | 309<br>286       | 385<br>336       |
| 750              | 059            | 083            | 106                    | 085          | -•038          | •024           | 017            | 067                                     | 224              | 271              |
| 850              | 034            | 042            | 046                    | 038          | •020           | •063           | •036           | 007                                     | 131              | 214              |
| •900             | 010            | 014            | 017                    | 011          | .038           | .08€           | .064           | •029                                    | 082              | 161              |
|                  | <del></del>    |                | •                      |              | Right          | side           |                |   | -                |                  |
| •025             | •257           | ~.131          | 416                    | 038          | a 165          | 798            | 049            | •366                                    | .466             | •507             |
| •075             | 073            | 223            | 218                    | 001          | •195           | ~+41¢          | 079            | •208                                    | •337             | •458             |
| •150             | 211            | 198            | 085                    | 045          | •214           | -•30E          | 074            | •128                                    | • 246            | •3 <b>6</b> 1    |
| •250<br>•350     | -•209<br>-•211 | 161<br>136     | 017<br>023             | •073<br>•047 | •158<br>•149   | 246            | 081<br>099     | ∙080<br>•034                            | •168<br>•112     | •278<br>•211     |
| .450             | 223            | -e159          | 049                    | •017         | •158           | 207            | 113            | 001                                     | •059             | •241             |
| +550             | 197            | 145            | 051                    | 001          | .130           | 177            | 104            | 010                                     | •040             | •110             |
| +650             | 144            | 108            | 040                    | 001          | .119           | 128            | 072            | 001                                     | •036             | •096             |
| •750             | 100            | 076            | 028                    | .003         | •103           | 068            | ~.021          | .027                                    | •052             | • 096            |
| ▶850             | 029            | 023            | 001                    | •031         | •119           | •001           | •038           | .073                                    | .082             | .107             |
| •900             | 008            | 005            | •009                   | .031         | •105           | •031           | • 050          | •077                                    | •087             | •096             |
|                  |                | Z/             | by = 0.                | 66           |                |                | Z/b            | , =0.93                                 |                  |                  |
|                  |                | -              |                        |              | Left           | side           |                |   |                  |                  |
| •000             | 322            | •493           | 264                    | -1.094       | -1.140         | 025            | • 426          | 310                                     | 809              | 678              |
| ●025             | •350           | 021            | 856                    | -1.136       | -1.098         | •16:           | 108            | 640                                     | 879              | 659              |
| ●075             | •209           | 053            | 601                    | -1:159       | -1.193         | 003            | 138            | 427                                     | 555              | 659              |
| •150             | •105           | 067            | 333                    | -1.191       | -1.438         | 087            | 120            | 221                                     | 497              | 639              |
| •250<br>•350     | •036           | ~•079<br>~•090 | -•223<br>-•191         | 582          | -1.232         | 087            | 074            | 147                                     | 460              | 602              |
| 450              | 010            | 090            | 168                    | 150<br>170   | -•717<br>-•334 | 1              |                |   |                  |                  |
| 550              | 059            | 081            | 145                    | 166          | -•228          |                |                |   |                  |                  |
| •650             | 036            | 051            | 088                    | 117          | 156            | 057            | 014            | 074                                     | 286              | 588              |
| •750             | 003            | 003            | 035                    | 062          | 098            | 027            | •016           | 028                                     | 212              | 505              |
| ∙850             | •027           | •041           | .020                   | 013          | 036            | •003           | •04B           | •004                                    | 150              | 398              |
| •900             | •047           | •061           | •043                   | •019         | 013            | •031           | •064           | •032                                    | 110              | 322              |
|                  |                |                |                        |              | Right          | side           |                |   |                  |                  |
| •025<br>•075     | 835<br>641     | 062<br>095     | •350<br>•190           | 448          | 475            | ~.597          | 145            | -183                                    | •246             | •278             |
| •150             | 325            | 081            | •105                   | •316<br>•212 | •419<br>•324   | 465            | -•163<br>-•124 | -•028<br>-•099                          | •052<br>-•062    | •130<br>•010     |
| 250              | 225            | 090            | •025                   | •121         | •218           | 1              | 4154           | <b>40</b> 77                            | 002              | •010             |
| •350             | 202            | 104            | 019                    | •050         | •140           |                |                |   |                  |                  |
| •450             | 170            | 113            | 042                    | 001          | •080           |                |                |   |                  |                  |
| •550             | 135            | 085            | 046                    | 020          | •043           |                |                |   |                  |                  |
| •650             | 087            | 046            | 028                    | 015          | •029           | 038            | 012            | 058                                     | -•089            | 121              |
| ₽750<br>₽850     | 034            | 003            | 001                    | 001          | •027           | 029            | •011           | 028                                     | 092              | 117              |
| •850<br>•900     | •036           | •068<br>•091   | •055<br>•077           | ∙036<br>•052 | ●047<br>●045   | ±029<br>±047   | ◆064<br>◆077   | •025<br>•043                            | 043              | 084              |
| 700              | .000           | 0091           | •017                   | •052         | ●U#⊃           | 1 .04/         | •077           | •043                                    | 020              | 073              |

TABLE VII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL

TAIL - Continued

(1)  $\alpha = 15.1^{\circ}$ ; M = 0.80

| · · · · · ·      |                |                | •             | for-           |              |            |                | p for        | _                |                  |
|------------------|----------------|----------------|---------------|----------------|--------------|------------|----------------|--------------|------------------|------------------|
| х                | B=-3.94        | B=0°           | B=3.9°        | B=7.9°         | B=12.70      | B=-3.9°    | B=0°           | B=3.9°       | B=7.9°           | B=12.70          |
| x C <sub>v</sub> |                | Z/6            | by = 0.1      | 7              |              |            | Z              | by = 0.3     | 38               |                  |
| v                |                |                |               |                | Left s       | ide        |                | ·            |                  |                  |
| •000<br>•025     | •564<br>•663   | •901           | •802          | • 733          | -399<br>-252 | 104<br>374 | •826<br>•030   | 555          | -1.728<br>-1.504 | -1:492<br>-1:737 |
| •025             | ~•195          | -•243<br>-•218 | •210<br>-•014 | .088<br>094    | 252<br>343   | 233        | 041            | 390          | 688              | -1.840           |
| 150              | 069            | 206            | 224           | 281            | 487          | 164        | 052            | 295          | 541              | 768              |
| •250             | 007            | 153            | 218           | 244            | 386          | •096       | 066            | 247          | 449              | 551              |
| +350             | 016            | 128            | 215           | 220            | 296          | •034       | 096            | 232          | 402              | -,528            |
| 450              | -+046          | 163            | 235           | 220            | 260          | 006        | 130            | ~.218        | 361              | 548              |
| .550<br>.650     | ~•057<br>~•053 | 153<br>116     | 209<br>154    | -•178<br>-•128 | 207<br>132   | 006<br>002 | -•095<br>-•064 | 175<br>124   | 327<br>286       | 445<br>381       |
| 750              | ~•045          | 081            | 100           | 083            | 065          | •031       | 014            | 060          | 204              | - 292            |
| 850              | 021            | 032            | 035           | 025            | •014         | 078        | •047           | .011         | 095              | 215              |
| 900              | •007           | •003           | 002           | .008           | •055         | •101       | ●082           | .052         | 034              | - (155           |
|                  |                |                | •             | _              | Right        | side       |                |              |                  |                  |
| •025<br>•075     | •324<br>-•022  | 098            | 447           | 072            | •138         | 729        | 052            | 1349         | +464             | •545<br>•462     |
| 150              | -•022<br>-•219 | -•227<br>-•194 | 223<br>072    | 009<br>.048    | •163<br>•197 | 438        | -•089<br>-•083 | •207<br>•140 | •343<br>•252     | 376              |
| 250              | 226            | 150            | 005           | .083           | 180          | 254        | 089            | .088         | .184             | 295              |
| •350             | 218            | ->124          | 014           | .066           | •117         | 238        | 107            | .041         | .126             | .221             |
| e 450            | 233            | 157            | 038           | •028           | •112         | 219        | 131            | •002         | •074             | .154             |
| ♦550             | 207            | 145            | 045           | •006           | •101         | 182        | 119            | 011          | •048             | •115             |
| +650             | 144            | 099            | 031           | •009           | •091         | 127        | 078            | •005         | •046             | •097             |
| <b>●750</b>      | -+089          | 070            | 014           | •012           | •083         | 051        | 022            | •038         | • 066            | •098             |
| +850<br>+900     | 019<br>.005    | -•008<br>•012  | .020<br>.031  | .041<br>.048   | •092<br>•084 | •019       | •045<br>•059   | •088<br>•098 | •098<br>•109     | •111<br>•104     |
| 1,00             | •003           |                | $b_{v} = 0$   |                |              | 1 .033     |                | =0.93        |                  | ****             |
|                  |                |                | - O.          |                | Left         | s ide      | -/             | -0.55        |                  |                  |
| •000             | ~.100          | •535           | 029           | 793            | -1.015       | •004       | •451           | 147          | 538              | 724              |
| 025              | +363           | 014            | 828           | -1.166         | 965          | 181        | 139            | 788          | 601              | 724              |
| 075              | •216           | 047            | 654           | -1.178         | -1.038       | •002       | 160            | 716          | 571              | 727              |
| •150             | •119           | 070            | 378           | -1.144         | -1.169       | 103        | 136            | 240          | 527              | 716              |
| ♦250             | •049           | 083            | 227           | 767            | -1.071       | 083        | 067            | 100          | 475              | 668              |
| •350             | -•009          | 099            | 194           | 138            | 833          |            |                |              |                  |                  |
| •450             | 045            | 105            | 172           | 155            | 605          |            |                |              |                  |                  |
| •550<br>•650     | -•059<br>-•031 | ~•087<br>-•046 | 135<br>071    | 154<br>095     | 436          | 042        | •007           | 045          | 306              | 524              |
| •750             | •013           | •023           | 014           | 037            | 275<br>164   | 006        | •042           | 002          | 214              | - 472            |
| 850              | •055           | .065           | .046          | •021           | 065          | •035       | •079           | •040         | 138              | - 396            |
| •900             | •073           | •090           | •072          | •045           | 028          | •064       | •102           | •066         | 088              | 339              |
|                  |                |                |               |                | Right        | side       |                |              |                  |                  |
| +025             | 848            | 040            | •375          | • 465<br>• 329 | •505         | 896        | 142<br>177     | 017          | .281             | •300<br>•155     |
| •075<br>•150     | 690<br>382     | ~∗078<br>-∗067 | .206<br>.118  | •237           | •427<br>•339 | 371<br>318 | 130            | 100          | •080<br>-•049    | • 006            |
| 250              | 226            | 089            | •051          | 137            | •235         | -1510      | 130            | *100         | • • • •          | 1000             |
| •350             | 198            | 107            | 014           | 057            | •147         |            |                |              |                  |                  |
| •450             | 163            | 101            | 040           | .009           | •081         |            |                |              |                  |                  |
| e550             | 124            | 080            | 043           | 015            | .038         |            |                |              |                  |                  |
| •650             | ~•068          | 037            | 022           | 009            | •018         | 007        | .013           | 011          | 088              | 137              |
| • 750            | 009            | •018           | •015          | •008           | •015         | •008       | •042           | -•002        | 083              | 143              |
| •850<br>•900     | •070<br>•101   | •093<br>•119   | •078<br>•106  | •058<br>•074   | •038<br>•038 | •064       | •103<br>•116   | •058<br>•071 | 026<br>002       | 106<br>108       |
| . 700            | 1              | 1117           | .100          | 3 V / 4        | 1030         | 1000       |                |              | +002             | 3100             |

TABLE VII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE AND VERTICAL

TAIL - Concluded

(m)  $\alpha = 15.1^{\circ}$ ; M = 0.85

|  |                |                    | Cp             | for-           |                |                | (              | p for          | _              |                      |
|--|----------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|
|  | B=-3.94        | B=0°               | B=3.9°         | B=7.9°         | B=12.7°        | B=-3.9°        | B=0°           | B=3.9°         | B=7.9°         | B=12.7°              |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |                | 2/                 | by = 0.1       | 7              |                |                | Z/             | by = 0.3       | 38             | •                    |
|  |                |                    |                |                | Left s         | ide            | -              |                |                |                      |
| •000<br>•025                           | •599<br>-•714  | - • 924<br>- • 223 | .838<br>.214   | •749<br>•113   | 180            | •192           | .843           | .344           | -1.356         | -1 • 224<br>-1 • 597 |
| 075                                    | 216            | 219                | 005            | <b></b> 076    | -•180<br>-•276 | •355<br>•216   | •018<br>-•052  | 513<br>407     | -1.356<br>722  | -1.597<br>-1.630     |
| •150                                   | 082            | 210                | 231            | 287            | 461            | 153            | 063            | 315            | - 593          | 826                  |
| .250                                   | 016            | 159                | 239            | 278            | 444            | •085           | 078            | 266            | 492            | 590                  |
| •350                                   | 032            | 133                | 233            | -,244          | 331            | •024           | 110            | 256            | 431            | 511                  |
| •450<br>•550                           | 059<br>069     | 176<br>159         | 263<br>226     | -•248<br>-•198 | 283<br>243     | 019<br>016     | 146<br>110     | 239<br>190     | 387<br>344     | -+649<br>-+476       |
| .650                                   | 062            | 123                | 167            | 139            | 173            | 011            | 076            | 139            | 301            | 425                  |
| <b>₽750</b>                            | 051            | 083                | 110            | 097            | 095            | .019           | 021            | 062            | 212            | 321                  |
| •850                                   | 025            | 028                | 039            | 028            | 002            | •068           | •048           | •008           | 100            | 230                  |
| •900                                   | 001            | •009               | 005            | •002           | .044           | •097           | • 085          | •056           | 038            | 167                  |
|  |                |                    |                |                | Right          | side           |                |                |                |                      |
| •025<br>•075                           | •338           | 096                | -•498          | 089            | •116           | 722            | 058            | •333           | 4455           | +546                 |
| 150                                    | -•014<br>-•234 | 241<br>190         | -•233<br>-•078 | 025<br>.041    | •140<br>•182   | 471<br>346     | 096<br>088     | •199<br>•136   | •337<br>•252   | •461<br>•372         |
| •250                                   | 249            | 136                | 009            | •080           | .170           | 279            | 090            | •091           | 183            | •291                 |
| • 350                                  | 237            | 125                | 021            | •057           | •110           | 257            | 116            | .038           | .123           | 219                  |
| .450                                   | 252            | 159                | 051            | •019           | •085           | 237            | 139            | 008            | .068           | .149                 |
| •550                                   | 224            | 149                | 058            | 001            | •078           | 194            | 123            | 021            | •041           | .108                 |
| •650<br>•750                           | 154<br>104     | 099<br>068         | 039<br>025     | 001<br>002     | ∙064<br>•058   | 133            | 085<br>026     | ÷006<br>•036   | •036           | •084                 |
| 850                                    | 026            | 008                | •014           | •035           | •077           | •924           | -048           | •086           | .061<br>.094   | •088<br>•096         |
| •900                                   | •002           | •016               | •031           | .038           | •068           | •054           | .061           | 102            | •101           | •090                 |
|  |                | Z/                 | by = 0.        | 66             |                |                | Z/by           | =0.93          |                |                      |
|  |                |                    |                |                | Left           | side           |                | <del></del>    |                |                      |
| •000                                   | 061            | €546               | •032           | -+686          | -1.031         | •032           | . 454          | 115            | 544            | 728                  |
| •025                                   | •355           | 025                | 882            | -1.209         | 962            | •170           | 146            | 960            | 636            | 731                  |
| •075<br>•150                           | •212<br>•108   | 058<br>076         | 706<br>        | -1.221         | 989            | 014            | 184            | 770            | 599            | 708                  |
| •250                                   | •037           | 075                | 395<br>250     | -1.172<br>794  | -1.016<br>966  | -•137<br>-•110 | -•147<br>-•075 | -•290<br>-•096 | 558<br>505     | 695                  |
| •350                                   | 022            | 109                | 213            | -•172          | 831            | -•110          | -1075          | -8076          | -6000          | 668                  |
| <b>450</b>                             | 065            | 116                | 182            | 195            | 675            |                |                |                |                |                      |
| •550                                   | 081            | 093                | 146            | -•185          | 517            | 1              |                |                |                | :                    |
| •650<br>•750                           | -+045          | 049                | 082            | 116            | 354            | 049            | •014           | 051            | 318            | 519                  |
| ●750<br>●850                           | +005<br>+048   | •028<br>•073       | 015<br>.048    | 051<br>.013    | 239<br>127     | 011<br>.035    | •045<br>•092   | •001           | 231            | - 465                |
| 900                                    | •070           | •075               | 078            | •039           | 080            | •065           | •112           | •051<br>•078   | -:149<br>-:103 | 398<br>349           |
|  |                |                    |                |                | Right          | L              | -              |                |                | •247                 |
| •025                                   | -+952          | 036                | •375           | . 44.0         |                | 859            | 110            | .100           | 205            | 200                  |
| •075                                   | 794            | 080                | 204            | • 460<br>• 325 | •506<br>•428   | 509            | 7.139<br>196   | -199<br>-033   | •285<br>•078   | •308<br>•157         |
| •150                                   | 411            | 070                | .122           | •232           | .337           | 349            | 145            | 125            | 066            | •004                 |
| •250                                   | 237            | 093                | •044           | •136           | •230           |                |                |                |                |                      |
| •350<br>•450                           | 214<br>181     | -•110<br>-•113     | 021<br>053     | •049<br>-•004  | •137<br>•070   |                |                |                |                |                      |
| 550                                    | -•137          | 088                | 056            | 034            | •070<br>•021   |                |                |                |                | i                    |
| .650                                   | 080            | 042                | 029            | 027            | •001           | 028            | •014           | 015            | 109            | 168                  |
| •750                                   | 014            | •022               | .015           | 002            | 006            | •002           | •051           | 001            | 097            | 174                  |
| ●850                                   | .067           | •105               | .088           | .051           | •019           | .063           | •115           | .065           | 037            | 140                  |
| •900                                   | •100           | •130               | •106           | .064           | .018           | •080           | •129           | •085           | 014            | 141                  |
|  | L              |                    |                | ·              |                | L              |                |                |                |                      |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  (a)  $\alpha = -9^\circ$ ; M = 0.60

|                   |                | <del></del>            | Cp           | for-           |                  | <u> </u>     |             | Cp for                | _              |                |
|-------------------|----------------|------------------------|--------------|----------------|------------------|--------------|-------------|-----------------------|----------------|----------------|
| x                 | B=-3.9°        | B=0°                   | B=39°        | B=7.90         | B=12.7°          | B=-3.9°      | B=0°        | B=39°                 | B=7.9°         | B=1270         |
| $\frac{x}{C_{v}}$ |                | Z                      | by = 0.1     | /              | . <u>L</u>       |              | Z/          | by = 0.               | <del>3</del> 8 | <u> </u>       |
| '                 |                | <u> </u>               |              | <del></del>    | Left s           | ide          |             | <del>- •</del>        |                |                |
| 4000              | 4683           | <b>≜825</b>            | •474         | 359            | -1.024           | •407         | • B 76      | 4499                  | m.132          | 795            |
| 000               | •683<br>•264   | 145                    | 671          | -1.258         | -1:373           | 385          | 115         | -: \$28               | -1:133         | -1:785         |
| •075<br>•150      | •103<br>-•017  | -•170<br>-•214         | 457<br>411   | -∎766<br>-∎587 | -1.316<br>-1.118 | •135<br>•024 | 186<br>207  | 552<br>439            | -1.049<br>748  | -1.143<br>939  |
| 250               | 056            | 195                    | 317          | -∎398          | 833              | ~.070        | 234         | -+404                 | 500            | - 909          |
| •350              | ~•082          | 184                    | 275          | 300            | 587              | 139          | 267         | 404                   | 410            | 756            |
| •450              | 132            | <b>~•207</b>           | 271          | 265            | 417              | 181          | 280         | 385                   | 352            | <b>-</b> •596  |
| •550<br>•650      | -•128<br>-•093 | 184                    | 229          | 215            | -•302            | 176          | -•248       | <b>-</b> 4319         | 297            | 454            |
| •750              | 047            | -•122<br>-•076         | 162<br>095   | 148<br>097     | 215<br>159       | 144<br>095   | 193<br>120  | -•241<br>-•151        | -•251<br>-•196 | 352<br>288     |
| 850               | 001            | 012                    | 019          | 031            | 104              | 008          | 028         | 049                   | 129            | 244            |
| •900              | •029           | •029                   | .027         | .008           | 067              | .020         | •011        | •001                  | 086            | - 6208         |
| 1                 |                |                        |              |                | Right            | side         |             |                       |                |                |
| •025              | 579            | 101                    | •303<br>•077 | •590           | •818             | 985          | 129         | •386                  | •641           | .811           |
| •075<br>•150      | -:499<br>-:416 | ~•198<br><b>~•</b> 212 |              | •305           | • 526            | -+568        | 202         | •133                  | • 349          | •542           |
| 250               | 333            | -•212<br>-•202         | 017<br>056   | •153<br>•073   | •339<br>•225     | -4402        | 218<br>239  | •013<br><b>-•</b> 075 | •181<br>•064   | •362<br>•215   |
| 350               | - 296          | -195                   | 095          | 001            | •119             | 393          | 262         | 137                   | 031            | 105            |
| •450              | 287            | 216                    | 135          | 067            | •034             | 370          | 278         | 188                   | 097            | •015           |
| ●550              | -•236          | 193                    | 128          | 086            | 001              | 314          | 255         | 171                   | 123            | 033            |
| •650              | 160            | -•131                  | 089          | 063            | 010              | 234          | 191         | 142                   | 118            | 056            |
|                   | -•091<br>-•006 | -•074<br>-•001         | 040<br>.017  | 035<br>.013    | 005<br>.015      | 137<br>031   | 111<br>017  | -•079<br>•001         | 081            | 056<br>040     |
| 900               | •022           | •034                   | .041         | •031           | •018             | •006         | •011        | •024                  | 028<br>019     | 067            |
|                   |                | Z/                     | by = 0.      | 66             |                  |              | Z/b         | , =0.93               |                |                |
|                   |                |                        |              |                | Left             | s ide        |             |                       |                |                |
| •000              | •379           | •876                   | •462         | 024            | 428              | •428         | •743        | •252                  | •199           | 274            |
| •025              | •393           | <b>17</b> 7            | -1.135       | -1.086         | 833              | 296          | 521         | -1.669                | 440            | - 403          |
| •075              | •149           | 239                    | 681          | -1.065         | 856              | 006          | 588         | -1.347                | 438            | 405            |
| •150<br>•250      | 010<br>125     | -•292<br>-•340         | 600<br>554   | 861<br>532     | 881<br>838       | 250<br>324   | 627<br>544  | -1.324<br>-1.093      | -•426<br>-•433 | 412            |
| 350               | 208            | 377                    | 547          | 392<br>392     | 686              | - 6 3 2 4    | -4344       | -14043                | 33             | -•426          |
| .450              | 264            | 390                    | 515          | 371            | <b>~•50</b> 2    |              |             |                       |                |                |
| •550              | 261            | 349                    | 432          | 375            | 488              |              |             |                       |                |                |
| •650              | 208            | -•248                  | 314          | 398            | 516              | -+245        | 280         | 294                   | 470            | -+481          |
| ●750<br>●850      | 137<br>056     | 161<br>076             | 204          | 435            | ~±532            | 146          | 152         | 185                   | 470            | 477            |
| •900              | 031            | 076                    | 098<br>047   | -•424<br>-•405 | -•513<br>-•511   | 056<br>015   | 040<br>.006 | 091<br>042            | 438<br>410     | -•435<br>-•417 |
|                   |                |                        |              |                | Right            | <b></b>      |             |                       |                |                |
| .025              | -1.026         | 166                    | •418         | •657           | •802             | -1.586       | <b>487</b>  | . 224                 |                | 700            |
| 075               | 711            | 260                    | 133          | •351           | •542             | -1.328       | 615         | •326<br>-•031         | •553<br>•188   | •799<br>•461   |
| •150              | 579            | <b></b> 283            | •001         | .179           | •362             | -1.365       | 601         | 231                   | 054            | 197            |
| •250              | 570            | 345                    | 123          | •018           | •197             | 1            |             |                       |                |                |
| • 350<br>• 450    | 568<br>515     | 381<br>381             | 206<br>252   | 100            | •064             | 1            |             |                       |                |                |
| •550              | -0427          | 342                    | 248          | 180<br>208     | 042<br>104       | 1            |             |                       |                |                |
| •650              | 317            | 255                    | 197          | 196            | 129              | 277          | 239         | 190                   | 238            | 182            |
| •750              | 199            | 168                    | 123          | 173            | 146              | 183          | 143         | 128                   | 221            | 215            |
| e850              | 072            | ~.044                  | 024          | 123            | 136              | -•077        | 017         | 015                   | 171            | 182            |
| •900              | -•026          | -•005                  | •004         | 116            | -,173            | 031          | •032        | •017                  | 187            | <b>-</b> •201  |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t \neq 0^\circ$  - Continued (b)  $\alpha = -9^\circ$ ; M = 0.80

|                     |                |                | Cp                    | for-           |                |                    |                | Cp for           |                  |                |
|---------------------|----------------|----------------|-----------------------|----------------|----------------|--------------------|----------------|------------------|------------------|----------------|
| X<br>C <sub>v</sub> | B=-3.9°        | B=0°           | B=39                  | B=7.9°         | B=12.70        | B=-3.9°            |                | B=3.9°           | B=7.9°           | B=12.7°        |
| Cv                  |                | 2/             | by = 0.1              | '/             | <u> </u>       | <del> </del>       | 2/             |                  | 1/               | D-12.1         |
|                     |                |                |                       |                | Left s         | ide                |                | -, 0.0           |                  |                |
| 000                 | •840<br>•276   | •891<br>-•110  | •697<br>-•619         | •28 <b>2</b>   | 215            | •678               | •919           | -1.759<br>-1.129 | -1.612           | 085            |
| 075                 | 117            | 149            | 448                   | -1.099<br>955  | 963<br>860     | •362<br>•141       | 087<br>182     | ~1.129<br>~.469  | -1.612<br>-1.433 | 638<br>644     |
| •150                | 010            | 221            | 428                   | 830            | 790            | 021                | 216            | -4423            | -1.258           | - 666          |
| • 250               | 063            | 218            | 314                   | 372            | 674            | 083                | 262            | ~-380            | 317              | - 695          |
| • 350               | 100            | 213            | 267                   | 247            | 600            | <b>~</b> • 189     | <b>-</b> •328  | 389              | 293              | 664            |
| •450<br>•550        | -•177<br>-•200 | 270<br>257     | 282<br>236            | 236            | 534            | 273                | -•389          | 380              | 302              | 588            |
| 650                 | 155            | -0257<br>-0164 | 156                   | 203<br>143     | ~•461<br>~•389 | 291                | 362            | 313              | 264              | -•490          |
| 750                 | 091            | 096            | 084                   | - 193          | 313            | 253<br>148         | -+279<br>-+142 | 239              | - • 233          | 417            |
| .850                | 015            | 009            | 006                   | 034            | 232            | 048                | 029            | 158<br>056       | 193<br>140       | ~•343<br>~•288 |
| •900                | •027           | •036           | .043                  | 4002           | 190            | 004                | •026           | •000             | 097              | 253            |
|                     |                |                | •——                   |                | Right          | side               |                |                  |                  | *273           |
| 025                 | -+492<br>-+495 | 053            | •319                  | •599           | .830           | -1.076             | 109            | •378             | •640             | •819           |
| •075<br>•150        | 423            | -•190<br>-•219 | •092<br><b>-</b> •009 | • 320          | •542           | 530                | 201            | •132             | • 359            | •560           |
| • 250               | 326            | 221            | 066                   | •175<br>•083   | •360<br>•239   | 427<br>371         | 227<br>267     | •013             | •200             | •380           |
| •350                | 281            | 230            | 115                   | 005            | •125           | 366                | -•287<br>-•328 | 083<br>179       | •070<br>-•047    | • 230          |
| •450                | 279            | 273            | 187                   | 094            | •022           | 362                | 383            | 262              | 149              | •105<br>-•008  |
| ●550                | 235            | 260            | 202                   | 138            | 041            | 310                | 359            | 279              | 207              | 085            |
| •650                | <b>-</b> •149  | 168            | 145                   | 112            | 050            | 230                | 248            | 234              | 196              | 117            |
| •750                | 074            | ~.087          | 087                   | 086            | 057            | 138                | 127            | 132              | 143              | 111            |
| •850<br>•900        | ◆01C<br>◆047   | •008           | •002                  | 021            | 044            | 039                | 010            | 026              | 073              | 099            |
| .,,,,               | .047           | •040           | •029                  | •002           | 054            | •005               | •029           | 001              | 059              | 126            |
|                     |                |                | $b_V = 0.0$           | 56             |                |                    | Z/bv           | =0.93            |                  |                |
|                     |                |                |                       |                |                | s ide              |                |                  |                  |                |
| •000                | •698           | •936           | •773                  | .403           | •008           | •722               | ∙825           | •684             | •392             | 097            |
| •025                | •378           | 124            | -1.214                | -1.634         | 727            | .239               | 418            | -1.201           | 377              | 398            |
| •075<br>•150        | •151<br>-•015  | -•210<br>-•293 | 808                   | -1.400         | 741            | 054                | 570            | 521              | 360              | 385            |
| 250                 | 160            | 389            | 509<br>445            | -•901<br>-•591 | 761<br>706     | 346                | 799            | ~•480            | ~.346            | 381            |
| 350                 | 294            | ~•515          | 445                   | 342            | 658            | 363                | 716            | 474              | 351              | 386            |
| •450                | 432            | 612            | 438                   | 297            | 553            |                    |                |                  |                  | 1              |
| •550                | -+482          | 540            | 389                   | 322            | 455            |                    |                |                  |                  |                |
| •650                | 385            | 253            | 331                   | 363            | 458            | 351                | 294            | 426              | 388              | 429            |
| •750                | 193            | 173            | 271                   | 398            | 472            | 242                | 156            | 414              | 394              | 423            |
| •850<br>•900        | 128            | 060            | 224                   | 420            | -+466          | <b>~</b> •175      | 043            | 374              | 377              | 401            |
| 1 .900              | 106            | -+014          | 193                   | -+430          | 472            | 154                | - 009          | -•339            | 369              | 389            |
| .025                | -1.196         | 118            | .407                  | •667           | Right          | <i>side</i> -1.100 | 360            | . 788            |                  | ]              |
| •075                | 7 <b>9</b> 9   | 237            | 131                   | •375           | 571            | -10100<br>-0440    | 685            | •255<br>-•099    | •591<br>•218     | 837            |
| •150                | 472            | 285            | 007                   | •198           | 391            | 418                | 765            | 331              | 050              | •504<br>•218   |
| e250                | 433            | <b>-•4</b> 05  | 168                   | •025           | •216           |                    |                |                  | 1000             | • - 10         |
| •350                | 432            | 537            | 299                   | 132            | •059           |                    |                |                  |                  | [              |
| •450                | 409            | 589            | 418                   | 268            | -•082          |                    |                |                  |                  | ĺ              |
| •550<br>•650        | 359<br>308     | 512            | 443                   | 342            | 175            |                    |                |                  | _                | i              |
| 750                 | -+308<br>-+274 | -•305<br>-•170 | 360<br>179            | 322<br>252     | 210            | 397                | 259            | 322              | 346              | 261            |
| 850                 | 230            | -•170<br>-•029 | 090                   | 144            | -•200<br>-•160 | 395<br>368         | -•149<br>-•026 | -•216<br>-•121   | 270              | - 0245         |
| 900                 | 198            | 025            | 069                   | 167            | 187            | 358<br>337         | •025           | -•121<br>-•116   | 181<br>183       | 178<br>189     |
|                     |                |                |                       |                |                |                    |                |                  | • 103            | - 107          |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (c)  $\alpha = -9^\circ$ ; M = 0.85

|                   | Cp for-        |                         |               |                  |                | Cp for-        |                        |                |                |                              |  |  |
|-------------------|----------------|-------------------------|---------------|------------------|----------------|----------------|------------------------|----------------|----------------|------------------------------|--|--|
| X                 | B=-3.9         | B=0°                    | B=3.9°        | B=7.9°           | B=12.7°        | B=-3.9°        |                        | B=39°          | B=7.9°         | B=12.70                      |  |  |
| $\frac{x}{C_{v}}$ |                | Z/                      | by = 0.1      | 7                | -              |                | Z/                     | by = 0.        | <del>3</del> 8 | 45                           |  |  |
| •                 |                |                         |               |                  | Left s         | ide            |                        |                |                |                              |  |  |
| •000              | •877           | •914                    | •755          | • 3 <b>9</b> 1   | 063            | •734           | . 93A                  | 4818           | .492           | •076                         |  |  |
| 000               | ▶286           | - 092                   | <b>~</b> .556 | -1.022           | -:063<br>-:771 | e363           | - 838                  | -1.022         | -1.415         | - 598                        |  |  |
| .075<br>.150      | •129<br>-•008  | -•137<br>-•219          | 503<br>437    | 885              | 706<br>481     | •144           | 173                    | -•788<br>-•437 | -1.284         | 608                          |  |  |
| 250               | 060            | -•217                   | ~•315         | 833<br>688       | ~•681<br>~•618 | •027<br>-•080  | 209<br>251             | 427<br>368     | -1.193<br>816  | 628<br>650                   |  |  |
| 350               | 106            | 213                     | 269           | -•2 <b>51</b>    | 586            | 187            | 325                    | 383            | ~.178          | - 636                        |  |  |
| ø450              | 197            | 296                     | 289           | 199              | ~.563          | 297            | 421                    | 399            | 212            | 588                          |  |  |
| 550               | ~•253          | 321                     | 249           | 179              | 506            | -•354          | 464                    | 328            | 237            | 517                          |  |  |
| •650              | -+214          | 213                     | 161           | 142              | 448            | 371            | 407                    | 246            | 231            | 454                          |  |  |
| •750<br>•850      | 151            | 112                     | 088           | 103              | 383            | - • 276        | 125                    | 162            | 205            | 396                          |  |  |
| •900              | -•040<br>•012  | 008<br>.046             | 008<br>.042   | -•045<br>-•005   | -•307<br>-•274 | 067<br>011     | 016                    | 065            | 159            | 353                          |  |  |
| • >00             |                |                         | 1042          |                  |                | side           | •041                   | 007            | 117            | 316                          |  |  |
| •025              | 446            | ~•025                   | •329          | . 4 00           |                |                |                        | 076            |                | 01:                          |  |  |
| 075               | 578            | U25<br>172              | •102          | •600<br>•322     | ∙827<br>•543   | 997<br>793     | -•076<br>-•184         | •379<br>•135   | •637<br>•360   | •91 <b>6</b><br>•55 <b>7</b> |  |  |
| •150              | -+46B          | 211                     | 004           | •170             | •357           | 426            | 213                    | .018           | .205           | 380                          |  |  |
| a 250             | 333            | 216                     | -,065         | .081             | .236           | 354            | 249                    | 087            | .074           | .232                         |  |  |
| • 350             | 284            | 230                     | 121           | 010              | •123           | -+357          | 324                    | 185            | 050            | •097                         |  |  |
| • 450             | 287            | 290                     | 208           | -•116            | •004           | -•371          | 417                    | - 296          | 175            | 030                          |  |  |
| •550              | 243            | 313                     | 256           | <b>-•175</b>     | 067            | 316            | 474                    | -4360          | 255            | 124                          |  |  |
| •650<br>•750      | 150<br>078     | -•203<br>-•099          | 206<br>136    | 156<br>133       | -•090<br>-•113 | -•233<br>-•141 | ~•307<br>~•122         | 359<br>198     | -•274<br>-•211 | 170                          |  |  |
| 850               | •009           | •011                    | 025           | <b>-</b> •053    | -•115<br>-•094 | 053            | 001                    | -•198<br>-•059 | 211<br>104     | 173<br>146                   |  |  |
| 900               | •047           | •053                    | .016          | 021              | 113            | 010            | •045                   | 015            | 086            | 174                          |  |  |
|                   |                | z/b <sub>v</sub> = 0.66 |               |                  |                |                | z/b <sub>v</sub> =0.93 |                |                |                              |  |  |
|                   |                | Left side               |               |                  |                |                |                        |                |                |                              |  |  |
| •000              | • 752          | •958                    | .829          | •509             | •122           | •770           | •861                   | •722           | •419           | •026                         |  |  |
| .025<br>.075      | •390           | 098                     | -1.101        | -1.469           | 694            | •250           | 345                    | -1.007         | 879            | 416                          |  |  |
| •150              | ●167<br>●004   | -•184<br>-•264          | 905<br>596    | -1.310<br>-1.179 | -•598<br>-•706 | 018<br>330     | 488<br>733             | 447<br>406     | -•363<br>-•349 | 398<br>390                   |  |  |
| .250              | 143            | 354                     | 368           | 481              | 660            | 320            | <b>-•</b> 730          | 402            | -•349<br>-•350 | 390                          |  |  |
| • 350             | 286            | 482                     | 399           | 347              | 590            | •3.20          | • 150                  | • +02          | • 550          | • > > /                      |  |  |
| •450              | -•431          | 622                     | 439           | 344              | 530            |                |                        |                |                |                              |  |  |
| ♦550              | 561            | 724                     | 385           | 320              | 468            |                |                        |                |                |                              |  |  |
| •650<br>350       | -•633          | -•639                   | 326           | 349              | 473            | 858            | 418                    | 407            | -•380          | -•426                        |  |  |
| ●750<br>●850      | -•511<br>-•097 | -•085<br>-•043          | 291<br>259    | -•386<br>-•409   | -•483<br>-•473 | 370            | -•281<br>- 122         | -•405<br>275   | -•395          | 423                          |  |  |
| 4900              | 108            | 005                     | 241           | -•409<br>-•426   | 484            | 211<br>181     | -•123<br>-•059         | -•375<br>-•356 | -•374<br>-•363 | 404<br>396                   |  |  |
|                   | <del></del>    |                         |               |                  | Right          | side           |                        |                |                |                              |  |  |
| •025              | -1.078         | 076                     | •411          | •667             |                | 991            | 267                    | •280           | •614           | •843                         |  |  |
| ●075              | -4900          | 204                     | •142          | • 380            | •826<br>•573   | 386            | 580                    | 074            | 248            | 510                          |  |  |
| •150              | 651            | <b>-</b> •249           | •008          | •209             | • 393          | 363            | <b>-</b> •692          | 312            | 031            | •220                         |  |  |
| ●250<br>●350      | -•337<br>-•394 | -•361<br>-•405          | 151<br>298    | •035             | •214           |                |                        |                |                |                              |  |  |
| 450               | 404            | -•495<br>-•629          | 439           | 127<br>285       | •049<br>-•106  |                |                        |                |                |                              |  |  |
| 550               | 354            | <b></b> 716             | 566           | -4395            | -•106<br>-•230 |                |                        |                |                |                              |  |  |
| •650              | 304            | 529                     | 597           | 468              | 311            | 370            | 375                    | 609            | 660            | 480                          |  |  |
| •750              | -•291          | 119                     | 420           | 429              | 310            | 378            | 273                    | 463            | 393            | 290                          |  |  |
| •850              | 273            | 019                     | 074           | 135              | 181            | 361            | 139                    | 269            | 212            | 187                          |  |  |
| •900              | 250            | •024                    | 082           | 165              | -+204          | 340            | 070                    | ~•205          | 185            | 187                          |  |  |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (d)  $\alpha = -9^\circ$ ; M = 0.90

| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | Γ   |            | Cp for-     |      |          |               |            | (        | op for | _           |           |              |
|--|-----|------------|-------------|------|----------|---------------|------------|----------|--------|-------------|-----------|--------------|
| Correction   Cor   |     | х          | B = - 3.99  | B=0° | B=3.90   | B=7.9°        | B=12.70    | B=-3.9"  | B=0°   | B=39°       | B=7.9°    | B=12.7°      |
| Left side  |     | <u>C.,</u> |             | Z/   | by = 0.1 | 7             | <u>Li.</u> |          | Z/     | $b_V = 0.3$ | 38        |              |
| 0.025  |     | •          |             |      |          |               | ide        |          |        |             |           |              |
| 0075   | Γ   | .000       | •915        | •937 | .809     | •497          | •057       |          | • 954  | •865        | . • 597   | .167         |
| 150  |     |            |             |      |          |               |            |          |        |             |           |              |
| 1390   |     |            |             |      |          |               |            | 1        |        |             | -         | 647          |
| 450  | 1   |            |             |      |          |               |            |          |        |             |           | 664          |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   |     |            |             |      |          |               |            |          |        |             |           | 640          |
| 050  |     |            |             |      |          |               |            |          |        |             |           |              |
| 1750   | 1   |            |             |      |          | -             |            |          |        |             |           | 441          |
| **************************************   | 1   | •750       | 312         | 173  | 098      |               | 363        |          | 393    |             |           | 409          |
|  |     |            |             |      |          |               |            |          |        |             |           | 390          |
| **************************************   |     | • 900      | -4024       | •048 | •037     | <b>→</b> •022 | -•266      | 075      | •068   | 020         | 153       | 348          |
| **************************************   |     |            |             |      |          |               |            |          |        |             |           |              |
| 150  |     |            |             |      |          |               |            |          |        |             | •641      | .829         |
| *250   |     |            |             |      |          |               |            |          |        |             |           | •375<br>•398 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  |     | .250       | 503         | 214  |          |               |            |          |        |             |           | .249         |
| $ \begin{array}{c} \bullet 550 \\ \bullet 650 \\ \bullet 148 \\ \bullet - 292 \\ \bullet - 267 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 283 \\ \bullet - 280 \\ \bullet - 174 \\ \bullet - 152 \\ \bullet - 157 \\ \bullet - 157 \\ \bullet - 325 \\ \bullet - 283 \\ \bullet - $ |     |            |             |      |          |               |            |          |        |             | 039       | .114         |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  |     |            |             |      |          |               |            |          |        |             |           | 024          |
| $ \begin{array}{c} .750 \\ .850 \\ .900 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .005 \\ .008 \\ .008 \\ .008 \\ .008 \\ .009 \\ .$  |     |            |             |      |          |               |            |          |        |             |           | 129          |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | ١   |            |             |      |          |               |            |          |        |             |           |              |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | 1   |            |             |      |          |               |            |          |        |             |           | - 256        |
| ## Company of the com   |     |            | •050        |      |          |               |            |          |        |             |           | 289          |
| **************************************   |     |            |             |      |          |               |            |          |        |             |           |              |
| **************************************   |     |            |             |      |          |               | Left       | side     |        |             |           |              |
| **************************************   | -   |            |             |      |          |               |            | .813     | •893   | •784        | •561      | •124         |
| **150  | 1   |            |             |      |          |               |            |          |        |             |           | 402          |
| *250   | ł   |            |             |      |          |               |            |          |        |             |           | 382          |
| **************************************   |     |            |             |      |          |               |            |          |        |             |           | -            |
| **************************************   | -   |            |             | -    |          |               |            | - • 50 7 | -•667  | 6231        | -6340     | - 0 3 / 6    |
| **************************************   | 1   |            |             |      |          |               |            |          |        |             |           |              |
| *750   | - [ |            |             |      |          |               |            |          |        |             |           |              |
| **************************************   |     |            |             |      |          |               |            | 1        |        |             |           | 402          |
| **************************************   |     |            |             |      |          |               |            | 1 -      |        |             |           | -•401        |
| Right side  **O25  | i   |            |             |      |          |               |            |          |        |             |           |              |
| **O25  |     |            | <u> </u>    |      |          |               |            |          |        |             | • , , , , | - • 501      |
| +075   | - 1 | .025       | - 648       | AE4  | . 424    |               |            |          | 100    |             |           |              |
| **************************************   | - [ | 075        |             |      |          | 395           | • 592      | 351      | 496    | - 035       | 4279      | •863<br>•534 |
| *250   | - 1 |            | <b></b> 725 | 218  | .033     | .230          |            |          |        |             |           | 251          |
| **************************************   | - 1 |            |             |      |          |               |            | l        |        |             |           |              |
| •550     -•339     -•687     -•552     -•405     -•220       •650     -•289     -•689     -•639     -•482     -•320     -•335     -•411     -•779     -•741     -•56       •750     -•313     -•353     -•695     -•562     -•426     -•347     -•372     -•779     -•783     -•03       •850     -•319     •017     -•620     -•572     -•443     -•339     -•284     -•508     -•610     -•45  | ı   |            |             |      | •        |               |            |          |        |             |           |              |
| *650 -*289 -*689 -*639 -*482 -*320 -*335 -*411 -*779 -*741 -*56<br>*750 -*313 -*353 -*695 -*562 -*426 -*347 -*372 -*779 -*783 -**63<br>*850 -*319 *017 -*620 -*572 -*443 -*339 -*284 -*508 -*610 -*45  | - 1 |            |             |      |          |               |            | 1        |        |             |           |              |
| •750 -•313 -•353 -•695 -•562 -•426 -•347 -•372 -•779 -•783 -•63<br>•850 -•319 •017 -•620 -•572 -•443 -•339 -•284 -•508 -•610 -•45  | - 1 |            |             |      |          |               |            | 335      | 413    | 779         | -4741     | 564          |
| •850 -•319 •017 -•620 -•572 -•443 -•339 -•284 -•508 -•610 -•45   |     | •750       |             |      |          |               |            |          |        |             |           | 031          |
| •900   -•311   •037   -•340   -•564   -•436   -•326   -•226   -•421   -•429   -•27   |     |            |             |      |          | 572           | 443        | 339      | 284    |             |           | 459          |
|  |     | • 900      | 311         | .037 | 340      | 564           | 436        | 326      | 226    | -•421       | 429       | 279          |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t \approx 0^\circ$  - Continued (e)  $\alpha = -9^\circ$ ; M = 0.92

|                             |                       |                | Cp                   | for-           | <del> </del>   |                |                | Cp for           |                  | <del></del>                             |
|-----------------------------|-----------------------|----------------|----------------------|----------------|----------------|----------------|----------------|------------------|------------------|---|
| X                           | B=-3.99               | B=0°           | B=39°                | B=7.90         | B=12.7°        | B=-3.9°        | B=0°           | B=3.9°           | B=79°            | B=127°                                  |
| \\ \frac{x}{C_{\mathbf{V}}} |                       | Z/1            | by = 0.1             | /              | 1/             |                |                | $b_v = 0.3$      | 1/-              | ٠ــــ                                   |
|                             |                       |                |                      |                | Left s         | ide            |                | - <b>y</b> - 0.0 |                  |   |
| *800<br>*825                | :331                  | -:339          | 829<br>452           | •522<br>-•896  | -:188          | 809<br>367     | -: 843         | - 883<br>- 849   | A621             | •204                                    |
| 075                         | *300<br>*147          | 061<br>113     | 452<br>464           | 896<br>758     | 809<br>718     |                |                |                  | -1.170           | 604                                     |
| .150                        | 006                   | 209            | 454                  | -1744          | -+686          | •159<br>•043   | 160<br>202     | -•715<br>-•579   | -1.084<br>-1.021 | 611<br>628                              |
| •250                        | ~•051                 | 222            | 520                  | 756            | 624            | 055            | 227            | 503              | -1.021<br>956    | 648                                     |
| • 350                       | ~•095                 | ~.199          | 328                  | 576            | 567            | ~+167          | 304            | 489              | 833              | 633                                     |
| • 450                       | ~•199                 | 301            | ~.311                | 234            | 534            | ~.279          | 374            | 334              | 122              | 586                                     |
| •550<br>•650                | 308<br>271            | 373<br>357     | 234<br>164           | ~.104          | ~.491          | 381            | 485            | 262              | 100              | 511                                     |
| 750                         | 347                   | 350            | 106                  | 086<br>086     | 441<br>389     | 456            | 567            | -•283            | 168              | 454                                     |
| 850                         | ~•228                 | 043            | 020                  | 056            | 330            | 458<br>482     | 534<br>057     | 196<br>101       | 197              | 418                                     |
| •900                        | 074                   | •037           | •030                 | 020            | 291            | 372            | •081           | 040              | 186<br>154       | 396<br>359                              |
|                             |                       |                | •                    |                | Right          | side           |                |                  |                  |   |
| •025                        | 348                   | •003           | •351                 | •623           | •851           | 824            | 067            | •389             | •646             | .839                                    |
| •075<br>•150                | 517<br>461            | 158<br>213     | •121<br>•013         | • 348          | +566           | -4751          | 186            | •155             | •377             | .586                                    |
| 250                         | 543                   | -•215<br>-•230 | 048                  | •196<br>•103   | •385<br>•267   | 619            | 211            | •038             | •227             | •408                                    |
| •350                        | 345                   | 214            | 103                  | •008           | • 147          | ~+554<br>-+462 | 235<br>307     | 057              | •095             | •260                                    |
| •450                        | 300                   | ~.303          | 189                  | 102            | •019           | -•281          | -•307<br>-•393 | 162<br>270       | 026<br>158       | •125<br>-•014                           |
| a550                        | 220                   | 411            | 336                  | 196            | 077            | 263            | 492            | 391              | -•136<br>-•249   | 120                                     |
| e650                        | -4154                 | 340            | 271                  | 198            | 112            | 256            | 587            | 460              | 329              | - 195                                   |
| •750                        | 095                   | 291            | 340                  | 275            | 188            | 178            | 494            | 445              | 371              | 256                                     |
| •850<br>•900                | 006<br>.030           | 012<br>.047    | 175                  | 174            | 188            | -•098          | 017            | 433              | 333              | 262                                     |
| • 900                       | 1030                  |                | 058                  | 108            | <b>~•250</b>   | 051            | •053           | 209              | 306              | 324                                     |
|                             |                       | Z/,            | b <sub>v</sub> = 0.0 | 66             |                |                | Z/b            | =0.93            |                  |   |
|                             |                       |                |                      |                | Left           | s ide          |                |                  |                  |   |
| 000                         | •818<br>• <b>40</b> 5 | •986<br>-•053  | •899<br>-•924        | -1.226         | • 240          | ●825           | •908           | •803             | •575             | .118                                    |
| 075                         | •193                  | -•150          | -•72 <del>4</del>    | -1.102         | ~•707<br>~•707 | •312<br>•047   | -•218<br>-•382 | -•826<br>-•391   | 921<br>331       | 404                                     |
| •150                        | •038                  | 227            | 734                  | -1.042         | 709            | 267            | 635            | 344              | 329              | 385<br>378                              |
| •250                        | 102                   | 313            | 658                  | 925            | 647            | 309            | 664            | 338              | 330              | 378                                     |
| •350                        | 247                   | 424            | ~.416                | 426            | 538            |                |                |                  |                  | • |
| •450<br>•550                | ~+392                 | 551            | 228                  | 331            | 504            |                |                |                  |                  |   |
| •650                        | 514<br>638            | -+684<br>-+744 | 330<br>336           | 329            | 441            |                | ,              |                  |                  |   |
| .750                        | ~.698                 | 691            | ~•351                | -•347<br>-•371 | 439<br>446     | 895            | 480            | ~:371            | 357              | 401                                     |
| 850                         | ~.660                 | 230            | 351                  | =+371<br>=+387 | 439            | -+840<br>-+594 | -+461<br>-+422 | -•380<br>-•370   | 358              | 402                                     |
| •900                        | 664                   | 051            | 344                  | 413            | 450            | 494            | 371            | 360              | 350<br>355       | 393<br>384                              |
|                             | <del></del> -         |                |                      |                | Right          |                |                |                  |                  | • 504                                   |
| •025<br>•075                | 905                   | 051            | .433                 | •679           | ø854           | ~.835          | 174            | •338             |                  | .075                                    |
|                             | 789                   | 182            | •433<br>•179         | +404           | 606            | 364            | 469            | 007              | •643<br>•292     | •875<br>•553                            |
| 150                         | ~•718                 | 219            | •049                 | .244           | •429           | 331            | 613            | 258              | •021             | •274                                    |
| •250                        | 686                   | 316            | 102                  | €075           | •257           |                |                |                  |                  |   |
| +350<br>+450                | 417<br>208            | 439<br>572     | 254<br>380           | 086<br>244     | -069           |                |                |                  |                  |   |
| •550                        | 308                   | 572<br>687     | 527                  | 244<br>385     | 069<br>204     |                |                |                  |                  |   |
| .650                        | 313                   | ~.734          | 622                  | 469            | 305            | 355            | 476            | 770              | 724              | 548                                     |
| 750                         | 347                   | 628            | 698                  | 547            | 412            | 363            | 445            | 801              | 784              | 611                                     |
| •850                        | 356                   | 098            | 665                  | 559            | 435            | 355            | 379            | 572              | 658              | 565                                     |
| •900                        | -•364                 | •014           | 642                  | 587            | 466            | 348            | 324            | 475              | 522              | - 463                                   |
| ш.                          |                       |                |                      |                |                |                |                |                  |                  |   |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWALD POSITION;  $i_t$  = 0° - Continued (f)  $\alpha$  = 0°; M = 0.60

| .000<br>.025<br>.075<br>.150<br>.250<br>.350 - | 3.94<br>-615<br>-266<br>-132<br>-041<br>-021<br>-024<br>-056<br>-058 | /- ·                             | B=3.9° by = 0.1  -3111 -549 -368 -309 | β=7.9°<br>/<br>441<br>-1.088<br>647 |                | β=-3.9°<br>ide | B=0°                                    | $\begin{array}{c c} C_p & for - \\ B = 3.9^{\circ} \\ b_v = 0.3 \end{array}$ | B=79°          | B=12.7°      |
|--|--|----------------------------------|---------------------------------------|-------------------------------------|----------------|----------------|---|--|----------------|--------------|
| .000<br>.025<br>.075<br>.150<br>.250<br>.350 - | •266<br>•132<br>•041<br>•021<br>•024                                 | -640<br>103<br>110<br>137<br>098 | -311<br>549<br>368                    | 441<br>-1.088                       |                |                | Z/                                      | b <sub>v</sub> = 0.3   | 8              |              |
| .000<br>.025<br>.075<br>.150<br>.250<br>.350 - | •266<br>•132<br>•041<br>•021<br>•024                                 | -640<br>103<br>110<br>137<br>098 | -311<br>549<br>368                    | 441<br>-1.088                       |                |                |   |  |                |              |
| *025<br>*075<br>*150<br>*250<br>*350 -         | •266<br>•132<br>•041<br>•021<br>•024                                 | 110<br>137<br>098                | 349<br>368                            | -1.088                              | -1.142         |                |   |  |                |              |
| •075<br>•150<br>•250<br>•350 -                 | •132<br>•041<br>•021<br>•024   | 110<br>137<br>098                | 368                                   |                                     |                | • 245<br>• 336 | -•714<br>-•085                          | - 297  | 420<br>-1.034  | 973<br>898   |
| •150<br>•250<br>•350 -<br>•450 -               | *041<br>*021<br>*024   | 098                              | 309                                   |                                     | -1.344         | •159           | 123                                     | 449  | 907            | 875          |
| •350 -<br>•450 -                               | •024<br>•056   |                                  |                                       | 459                                 | 827            | •066           | 132                                     | 336  | 666            | 820          |
| •450 -   | .056   |                                  | 214                                   | 286                                 | 398            | 002            | 146                                     | 289  | 400            | 767          |
|  |  |                                  | 187<br>178                            | 222<br>200                          | -•307<br>-•273 | 058<br>083     | 166<br>182                              | -•284<br>-•262   | 304<br>259     | 669<br>551   |
|  |  | -•128<br>-•107                   | 137                                   | 150                                 | 262            | 083            | 157                                     | 212  | 213            | 444          |
|  | •033   | 069                              | 087                                   | 107                                 | 187            | 063            | 119                                     | 151  | 172            | 364          |
| •750 -   | .011   | 031                              | 033                                   | 068                                 | 122            | 029            | 060                                     | 078  | 118            | 278          |
|  | •030   | •028                             | .023                                  | 016                                 | 049            | •030           | •019                                    | •005   | 047            | 198          |
| •900   | •048   | 840.                             | •051                                  | •012                                | Right          | •057<br>5/de   | +055                                    | •051   | 011            | 135          |
| 025 -  | •462   | 028                              | •315                                  | .584                                | •820           | 643            | 067                                     | •381   | •600           | .749         |
|  | · 389  | 107                              | •127                                  | 339                                 | •551           | 430            | 121                                     | .166   | .371           | 547          |
|  | .299   | 119                              | .055                                  | .216                                | ●396           | 335            | 132                                     | •071   | •232           | •405         |
|  | • 222  | 105                              | .023                                  | •143                                | • 296          | 281            | 144                                     | • 005  | .134           | • 2.87       |
|  | 194  | 121                              | <b>-</b> .022                         | •073                                | •200           | 267<br>253     | 164<br>177                              | 047<br>078   | ∙064<br>•005   | •205<br>•125 |
| 1 '  | •183<br>•138   | 132<br>134                       | 063<br>063                            | .014<br>007                         | •120<br>•089   | 210            | 159                                     | 083  | 022            | •125         |
|  | •088   | 076                              | 033                                   | 002                                 | •080           | 145            | 119                                     | 065  | 016            | 058          |
|  | •031   | 028                              | 011                                   | .016                                | •073           | 072            | 065                                     | 020  | .000           | •049         |
|  | •035   | •030                             | .035                                  | .048                                | •089           | •016           | .024                                    | .041   | .039           | •058         |
| •900   | •050   | •053                             | •051                                  | +053                                | •089           | •035           | •044                                    | •053   | •046           | •040         |
|  |  | 2/                               | $b_{\nu} = O.$                        | 66                                  |                |                | z/b                                     | ,=0.93   |                |              |
|  | •  |                                  |                                       |                                     | Left           | s ide          |   |  |                | _            |
|  | •198   | •721                             | .207                                  | 295                                 | 533            | •393           | 6775                                    | •098   | 227            | 727          |
|  | •379   | 110                              | 877                                   | -+952                               | 618            | •484           | 252                                     | -1.185   | 852            | 538          |
|  | • 202  | 137                              | 535<br>425                            | 904<br>813                          | - 633          | •205<br>-•013  | 315<br>333                              | 988<br>-1.013  | 343<br>336     | 362<br>358   |
|  | •089<br>•007   | -•157<br>-•175                   | 377                                   | 588                                 | 651<br>615     | 013            | 304                                     | 818  | 341            | 367          |
|  | •063   | 211                              | - 368                                 | 372                                 | 560            | 1              | • | ••••   |                | • - 5 .      |
|  | .106   | 227                              | 341                                   | 272                                 | 480            |                |   |  |                |              |
|  | •120   | 216                              | 280                                   | 261                                 | 407            |                |   |  |                |              |
|  | •092   | 153                              | 198                                   | 263                                 | 382            | 108            | -+159<br>074                            | 171  | 382            | 402          |
|  | •047<br>•010   | 080<br>006                       | 106<br>020                            | -•272<br>-•247                      | -•362<br>-•327 | 056<br>-012    | 074<br>.014                             | -∙085<br>•005  | -•377<br>-•347 | 371<br>313   |
|  | •025   | •026                             | .014                                  | 229                                 | 304            | 035            | •053                                    | .041   | 316            | 294          |
|  |  |                                  | ••••                                  |                                     | Right          | <u> </u>       | · · · · ·                               |  | <del></del>    |              |
| .025   | •823   | 055                              | .426                                  | •630                                | •736           | -1.183         | -+166                                   | •526   | •723           | •909         |
| •075 -   | •519   | 125                              | •207                                  | • 403                               | • 569          | -1.018         | -•290                                   | •200   | • 403          | •640         |
|  | *385   | 134                              | •105                                  | • 266                               | • 433          | -1.011         | 288                                     | •017   | .189           | •418         |
|  | •367   | 177                              | •019                                  | .150                                | •316           |                |   |  |                |              |
|  | ·•369<br>·•326   | -•207<br>-•227                   | 054<br>097                            | •062<br>-•009                       | •213<br>•131   | 1              |   |  |                |              |
|  | • 276  | 209                              | 115                                   | 050                                 | •067           |                |   |  |                |              |
|  | •192   | 162                              | 087                                   | 057                                 | •029           | 165            | <b>-</b> •155                           | 097  | 104            | 024          |
|  | -106   | 078                              | 045                                   | 043                                 | •002           | 083            | 078                                     | 078  | 122            | 073          |
|  | •002   | •010                             | •028                                  | 011                                 | -•011          | •019           | •024                                    | •026   | 088            | 062          |
| •900   | •035   | •042                             | •035                                  | 020                                 | 047            | •055           | •069                                    | •055   | 113            | -•093        |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  = 0° - Continued (g)  $\alpha$  = 0°; M = 0.80

|                   |                |                | Cp .                                  | for-           |                |              | -             | p for          | _                    | -              |
|-------------------|----------------|----------------|---------------------------------------|----------------|----------------|--------------|---------------|----------------|----------------------|----------------|
| X                 | B=-3.9         | B=0°           | B=39°                                 | B=7.9°         | B=12.7°        | B=-3.9°      | B=0°          | B=3.9°         | B=7.9°               | B=127°         |
| $\frac{x}{C_{v}}$ |                | Z/             | by = 0.1                              | 7              |                |              | 2/1           | by = 0.        | <del>3</del> 8       |                |
|                   |                | <del></del>    |                                       | <u>·</u>       | Left s         | ide          |               |                |                      |                |
| •000              | •741           | •668           | •514                                  | •181           | 215            | 1480         | •775          | •549           | •043                 | ~.396          |
| •025              | •270           | 068            | 534                                   | -1.143         | 895            | •480<br>•337 | 068           | 914            | -1-583               | 620            |
| •075              | •140           | 095            | 363                                   | 846            | -4802          | •158         | 122           | 431            | -1.120               | 619            |
| •150              | +045           | 131            | 315                                   | -•486          | -•731          | •069         | 137           | 326            | 725                  | 626            |
| ●250<br>●350      | •022<br>-•023  | -•101<br>-•121 | 211<br>179                            | -•282<br>-•227 | -•622<br>-•529 | -000<br>-007 | 155<br>190    | -•273<br>-•270 | 383<br>283           | -•628<br>-•594 |
| 450               | 070            | 146            | 182                                   | 199            | -4529<br>-465  | 123          | 217           | -•265          | 236                  | 534            |
| 550               | -079           | 128            | 142                                   | 149            | -• <b>3</b> 92 | 124          | 195           | 211            | 190                  | - · 465        |
| 650               | 055            | 083            | 083                                   | - 106          | 314            | 100          | 143           | 154            | 158                  | 408            |
| •750              | 024            | 033            | 026                                   | 058            | 244            | 049          | 060           | 075            | 117                  | 339            |
| ●850              | •030           | •030           | •032                                  | 010            | 151            | ●024         | •029          | •014           | 047                  | 282            |
| ●900              | ♦056           | •068           | •069                                  | •022           | 103            | •065         | •074          | •063           | 003                  | 242            |
|                   |                |                | · · · · · · · · · · · · · · · · · · · |                | Right          | side         |               |                |                      |                |
| 025               | 397            | •003           | .324                                  | •591<br>•357   | .815           | 916          | 045           | •393           | •611<br>•378         | •749           |
| •075<br>•150      | 384            | 095            | •142                                  |                | • 556          | 419          | 109<br>125    | •175           |                      | 545            |
| •250              | -•299<br>-•219 | 110<br>101     | •068<br>•030                          | •233<br>•161   | ∙397<br>•295   | 323<br>272   | 146           | •080<br>•009   | •248                 | •400           |
| •350              | 195            | -•124          | 023                                   | •077           | • 189          | 265          | 176           | 050            | •146<br>•066         | •280<br>•192   |
| •450              | 189            | 145            | 071                                   | •010           | •101           | 263          | 204           | 103            | 005                  | •095           |
| •550              | 147            | 131            | 081                                   | 017            | •052           | 224          | 188           | 122            | 049                  | •034           |
| e650              | 083            | 077            | 053                                   | 014            | .032           | 153          | 137           | 092            | 050                  | .010           |
| ●750              | 023            | 029            | 023                                   | 005            | •020           | 061          | 048           | 035            | 028                  | 006            |
| 850               | 4042           | •041           | •039                                  | •034           | 4025           | •030         | •047          | •038           | •016                 | 015            |
| ■900              | •074           | •066           | •057                                  | •046           | •017           | •063         | ●065          | ∙056           | •018                 | 048            |
|                   |                | 2/             | $b_{V} = 0.$                          | 66             |                |              | $z/b_v$       | =0.93          |                      |                |
|                   |                |                |                                       |                | Left           | s ide        |               |                |                      |                |
| •000              | <b>467</b>     | •783           | •508                                  | •093           | 285            | •666         | .837          | •561           | •178                 | 376            |
| ●025              | <b>4380</b>    | 084            | -1.093                                | <b>-</b> ∙822  | 619            | •430         | 277           | 854            | -•828                | 432            |
| •075              | •204           | 122            | 486                                   | 802            | 634            | •161         | 401           | 409            | -•297                | 382            |
| •150              | •087           | 160            | 363                                   | 719            | 652            | 068          | 413           | 406            | 291                  | 371            |
| • 250<br>• 350    | •000<br>-•091  | -•204<br>-•265 | 300<br>303                            | -•545<br>-•359 | -+644<br>-+616 | 142          | <b>-</b> •357 | 401            | 298                  | 383            |
| 450               | 166            | ~.302          | 308                                   | 267            | 520            |              |               |                |                      |                |
| 550               | 194            | 274            | 280                                   | 252            | 440            |              |               |                |                      |                |
| #650              | 151            | 185            | 214                                   | 261            | 423            | 168          | 160           | 309            | 344                  | 420            |
| •750              | 076            | 077            | 143                                   | 271            | 417            | 107          | 047           | 283            | 351                  | - 405          |
| 850               | -•008          | •009           | 071                                   | 264            | -•396          | 042          | •057          | 234            | 336                  | 367            |
| •900              | •021           | •053           | 030                                   | 250            | 380            | 021          | •103          | <b>-•198</b>   | 321                  | 344            |
|                   |                |                |                                       |                | Right          |              |               |                |                      |                |
| •025<br>•075      | -1.046<br>459  | 030<br>109     | •433<br>•211                          | •641<br>•410   | ●752<br>●576   | 935<br>552   | 139<br>374    | •490<br>•155   | •757<br>• <b>429</b> | •941<br>•655   |
| 150               | 340            | -•130          | •112                                  | •285           | •442           | ~.542        | 344           | 026            | 195                  | 407            |
| 250               | 333            | 195            | •006                                  | •164           | •316           |              | • •           |                |                      | - /- /         |
| •350              | 352            | 252            | 084                                   | 052            | •195           |              |               |                |                      |                |
| •450              | 340            | <b>- 287</b>   | 155                                   | 041            | •090           |              |               |                |                      |                |
| •550              | -•287          | -+267          | 187                                   | 102            | •005           |              |               |                |                      |                |
| •650              | 204            | 208            | 151                                   | 114            | 043            | 262          | 160           | 172            | 170                  | 109            |
| ●750<br>●850      | 123<br>018     | 057<br>.044    | 087<br>.002                           | 100<br>056     | -•072<br>-•072 | 225          | 060<br>.057   | 130<br>041     | 174<br>120           | 147<br>121     |
| 900               | -€018<br>•027  | •075           | •030                                  | 056            | -•072<br>-•112 | 160<br>123   | •097          | 039            | 120<br>141           | 154            |
| .700              | 0021           | •019           | •030                                  | -1001          | - 4 4 1 4      | -0123        | • • • • •     | •••            | -0471                |                |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWAFD POSITION;  $i_t$  = 0° - Continued (h)  $\alpha$  = 0°; M = 0.85

|                  |               |                  | Cp             | for-         |                |                |                | Cp for         | _              |                       |
|------------------|---------------|------------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|-----------------------|
| , x              | B=-3.9        | B=0°             |                | B=7.90       | B=12.70        | B=-3.9°        | B=0°           | B=3.9°         | B=7.9°         | B=12.7°               |
| \\ \frac{x}{C_V} | <del></del>   | 1                | by = 0.1       | <u> </u>     |                |                | Z/             | by = 0.        | <del>38</del>  |                       |
|                  |               | <del>-</del>     |                |              | Left s         | ide            |                |                |                |                       |
| •000<br>•025     | 2774          | 069              | •563<br>-•527  | -1.057       | 058<br>834     | 336            | -: 794         | -1.028         | -1.478         | ~•226<br>-•558        |
| 075              | 146           | 100              | 375            | 827          | 719            | •158           | 136            | 410            | -1.308         | ~.558                 |
| .150             | .046          | 146              | 336            | -+655        | 653            | •070           | 152            | 330            | 864            | 567                   |
| • 250            | •019          | 117              | 222            | 293          | 570            | 007            | 173            | 278            | 254            | 572                   |
| • 350            | 029           | 137              | 192            | 213          | 509            | 077<br>145     | 214<br>258     | 275<br>276     | -•287<br>-•256 | 556<br>515            |
| • 450            | -+089         | -•173<br>-•159   | 194<br>151     | 200<br>155   | 478<br>424     | 157            | -•243          | 219            | 206            | - 465                 |
| •550<br>•650     | 103<br>083    | 110              | 095            | -1115        | 362            | 143            | 182            | 164            | 169            | 416                   |
| 750              | 053           | 053              | 034            | 075          | 304            | 082            | 080            | 085            | 127            | 359                   |
| 850              | .013          | .024             | 030            | 019          | 219            | •002           | .024           | •006           | 060            | 314                   |
| 900              | •046          | .068             | •063           | •016         | 171            | •051           | •078           | •056           | 019            | 276                   |
|                  |               |                  |                |              | Right          | side           |                |                |                |                       |
| ●025             | 376           | •006             | •323           | •587         | •823           | 949            | 042            | •371           | • 599          | • 759                 |
| •075             | 389           | 100              | •139           | ±354         | • 562<br>• 399 | -•419<br>-•328 | -•120<br>-•135 | •169<br>•076   | •372<br>•240   | •550<br>• <b>40</b> 2 |
| •150             | 314           | 119              | •065<br>•023   | •229<br>•158 | • 295          | 272            | -+157          | 001            | •141           | •283                  |
| • 250<br>• 350   | 226           | 115<br>143       | 034            | •071         | •189           | 267            | 196            | 069            | •061           | .190                  |
| •450             | 196           | 170              | 091            | 006          | •091           | 269            | 234            | 134            | 029            | .086                  |
| -550             | 155           | 163              | 108            | 040          | •036           | 229            | 231            | 156            | 078            | .019                  |
| •650             | 093           | 106              | 078            | 037          | •008           | 158            | 176            | 131            | 087            | 020                   |
| •750             | 029           | 049              | 047            | 036          | 012            | 069            | 066            | 068            | 064            | 040                   |
| •850             | •040          | .035             | 025            | •017         | 012            | •022           | •041           | •022           | 009            | 047                   |
| •900             | •073          | •063             | .048           | •025         | 026            | •059           | 840.           | •040           | 010            | -•087                 |
|                  |               | Z                | by = 0         | .66          |                |                | Z/b            | v =0.93        | <u> </u>       |                       |
|                  |               |                  |                |              | Left           | s ide          |                |                |                |                       |
| •000             | 6522          | €7 <del>93</del> | •573           | •176         | 178            | •717           | ■865           | .628           | •251           | 255                   |
| •025             | ▶384          | 089              | -1.155         | 967          | 595            | •438           | 254            | 810            | 859            | 421                   |
| ♦075             | •207          | 130              | 416            | - • 902      | 601            | •158           | -•458<br>-•471 | 352<br>349     | 303<br>296     | 380<br>363            |
| •150             | •090          | -•170<br>-•226   | 346<br>289     | 761<br>534   | 618<br>612     | 083<br>155     | ~•358          | 348            | 300            | 372                   |
| • 250<br>• 350   | 002<br>110    | 307              | 293            | 342          | 609            | -0135          | • 550          | •340           | •,,,,          | •3.2                  |
| 450              | 208           | 367              | 308            | 266          | 536            |                |                |                |                |                       |
| .550             | 252           | 362              | 283            | 257          | 443            |                |                |                |                |                       |
| •650             | 211           | 209              | 221            | 269          | 423            | 219            | 153            | 308            | 340            | 413                   |
| •750             | 123           | 090              | 164            | 281          | 424            | 147            | 041            | 302            | 350            | -4407                 |
| •850             | 039           | •019             | 104            | 279          | 411            | 083            | •066<br>•100   | -•263<br>-•228 | 342<br>328     | 378<br>361            |
| •900             | 009           | •059             | 065            | 267          | 400            | 066            | •100           |                |                | ~ 6 3 6 1             |
|                  |               |                  |                |              |                | t side         | 110            | . 400          | •773           | •953                  |
| 025<br>075       | -1.114<br>356 | 029<br>112       | • 424<br>• 207 | .639<br>.409 | •764<br>•584   | 879<br>409     | 119<br>427     | •488<br>•145   | 436            | •663                  |
| 150              | 322           | 135              | .106           | 287          | .447           | 399            | 380            | 042            | •190           | •411                  |
| •250             | 304           | 211              | 002            | 165          | •320           | 1              |                |                |                |                       |
| •350             | 322           | 286              | 109            | .044         | •194           | 1              |                |                |                |                       |
| •450             | 320           | 350              | 201            | 065          | •077           | 1              |                |                |                |                       |
| •550             | 280           | 345              | 252            | 148          | 024            | 300            | 197            | 216            | 217            | 150                   |
| 1650             | 216           | 268              | 213            | 166<br>145   | 082<br>116     | 283            | 072            | 158            | 217            | 190                   |
| •750<br>•850     |               | 076<br>.044      | 125<br>021     | 082          | 102            | 238            | •053           | 074            | 146            | 144                   |
| 900              | 022           | •081             | •005           | 091          | 139            | 201            | •099           | 068            | 163            | 176                   |
| .,,,,            |               |                  |                |              |                |                |                |                |                |                       |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t = 0^\circ$  - Continued (i)  $\alpha = 0^\circ$ ; M = 0.90

| <u> </u>          |                |                | Cp             | for-           | <del></del>    | <u> </u>         |                | Cp for         |                  |              |
|-------------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|------------------|--------------|
|                   | R= 39          | \$ B = 0°      |                | B=7.9°         | B=12.7°        | B=-39°           |                | , F.           |                  | 10           |
| $\frac{x}{C_{v}}$ | 75 - 5.5       |                |                | 17             | p-12.7         | β=-3. <b>9</b> ° | <u> </u>       | B=3.9°         | 17               | B=12.7°      |
| ٧ '               | <u></u>        |                | bv = 0.1       |                |                | <u> </u>         | 2/             | $b_V = 0.3$    | 88               |              |
|                   |                |                |                |                | Left s         | ide              |                |                |                  |              |
| •000              | •804           | •687           | •615           | •401           | •075           | ■587             | .802           | •673           | •329             | 119          |
| ●025<br>●075      | •283<br>•152   | 054<br>090     | 478<br>381     | -•953<br>-•751 | 819<br>688     | •337<br>•162     | 063<br>130     |                | -1•281<br>-1•166 | 542<br>540   |
| 150               | 045            | 147            | 368            | 660            | 637            | •069             | 147            |                | -1.055           | 550          |
| •250              | •016           | 119            | 238            | 469            | 558            | 008              | 166            | 272            | 484              | 556          |
| • 350             | 035            | 141            | 202            | 244            | 500            | 085              | 218            | ~.273          | 127              | 539          |
| •450<br>•550      | 105<br>133     | -•190<br>-•202 | 203<br>163     | -•164<br>-•133 | 477            | 176<br>208       | -•289          | 281            | 208              | 507          |
| 650               | 125            | 161            | -•103          | -•111          | 433<br>381     | 219              | -•317<br>-•279 | 230<br>170     | 195<br>167       | 464<br>422   |
| ♦750              | 095            | 078            | 041            | 069            | 327            | 147              | 101            | 096            | 124              | 371          |
| 850               | 019            | •019           | •030           | 013            | 257            | 031              | .034           | 006            | 063              | 327          |
| •900              | •027           | •070           | •066           | •019           | 217            | •028             | •090           | •048           | 016              | 289          |
|                   |                |                |                |                | Right          | side             |                |                |                  |              |
| •025<br>•075      | 346<br>417     | •019<br>-•094  | .327<br>.142   | 1595           | -834           | -+916            | 037            | •368           | •606             | •768         |
| 150               | 351            | 121            | •060           | •364<br>•238   | •571<br>•410   | 614<br>348       | 114<br>129     | •166<br>•073   | •380<br>•250     | .560<br>.410 |
| 250               | 245            | 115            | •021           | •167           | •305           | 265              | 155            | 002            | •147             | 292          |
| •350              | 214            | 145            | 041            | •074           | •195           | 264              | 205            | 077            | •060             | .190         |
| • 450             | 203            | 185            | 107            | 008            | •087           | 269              | 269            | 155            | 033              | •084         |
| •550<br>•650      | 163<br>099     | 194<br>142     | 140<br>123     | 057            | •026           | 233              | 290            | 201            | 096              | •006         |
| 4750              | 034            | -1067          | 093            | -•063<br>-•072 | 018<br>042     | 160<br>075       | -•242<br>-•087 | -•209<br>-•140 | 128<br>121       | 045<br>078   |
| 850               | •040           | •035           | 007            | 016            | 046            | •012             | •055           | 025            | 057              | 087          |
| •900              | •070           | •071           | .024           | 1000           | 070            | ●046             | •083           | •013           | 037              | 125          |
|                   |                | Z/             | by = 0.        | 66             |                |                  | Z/by           | =0.93          |                  |              |
|                   |                |                |                |                | Left           | s ide            |                |                |                  |              |
| •000              | •571           | •815           | •637           | ▶288           | 081            | •763             | •897           | •691           | •336             | 127          |
| •025              | •390           | 065            | -1.060         | -1.347         | 585            | •455             | 182            | 825            | ~.837            | - 454        |
| •075              | •215           | 110            |                | -1.194         | 590            | •171             | 430            | 285            | 297              | 386          |
| •150<br>•250      | •097<br>•000   | 149<br>207     | -•287<br>-•227 | 734<br>506     | -•605<br>-•602 | 083<br>139       | 486<br>453     | -+284          | 287              | 370          |
| 350               | 118            | 323            | 270            | -•369          | 609            | - 4 1 3 9        |                | 287            | 291              | 372          |
| •450              | 238            | 426            | 303            | 287            | 543            |                  |                |                |                  |              |
| •550              | 350            | 473            | 273            | 248            | ~•446          |                  |                |                |                  |              |
| •650<br>•750      | 334            | 441            | 225            | - , 244        | ~•423          | ~•581            | 246            | -•291          | 319              | - • 407      |
| 850               | -•254<br>-•067 | -•066<br>•038  | 179<br>134     | 270<br>281     | 430<br>422     | -•191<br>-•094   | -•133<br>-•011 | -•295<br>-•274 | 329<br>322       | 409<br>390   |
| 900               | 031            | •081           | 101            | -•201<br>-•276 | 418            | -•094<br>-•087   | •045           | -•274<br>-•253 | 315              | 375          |
|                   |                |                |                |                | Right          |                  |                |                |                  |              |
| •025              | -1.047         | 011            | •425           | +645           | •782           | 754              | 066            | •500           | •789             | •970         |
| •075              | 799            | 095            | .213           | • 429          | •594           | <b>-</b> •311    | 453            | •151           | 4449             | •673         |
| •150              | -+252<br>-+252 | 118            | 115            | .300           | •460           | 307              | 411            | -+040          | •209             | •415         |
| €250<br>€350      | -•252<br>-•293 | -•202<br>-•310 | .001<br>111    | •178<br>•051   | •330<br>•198   |                  |                |                |                  |              |
| •450              | 300            | 379            | 227            | 069            | 066            |                  |                |                |                  |              |
| •550              | 269            | 426            | 327            | 171            | 048            |                  |                |                |                  |              |
| •650              | 218            | 382            | 338            | 247            | 131            | 293              | 247            | 562            | 454              | 240          |
| •750<br>•850      | -•171<br>-•099 | 034            | 317            | -•276          | 191            | -•293            | 158            | 256            | 362              | 293          |
| 900               | 071            | •063<br>•101   | -•054<br>-•018 | -•135<br>-•113 | 148<br>174     | -•264<br>-•235   | -•043<br>•026  | 104<br>087     | 148<br>153       | 182<br>211   |
|                   |                | •              | ••••           | •              | 44,4           | •                | 7020           | 1001           | 4177             | - • - 1 1    |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  = 0° - Continued (j)  $\alpha$  = 0°; M = 0.92

|                              |                |                | Cp             | for-   |                            |  |                | Co for                                  | _              |                |
|------------------------------|----------------|----------------|----------------|--|----------------------------|--|----------------|---|----------------|----------------|
| ¥                            | B=-3.9         | B=0°           |                | B=7.9°   | B=12.7°                    | B=-3.9°  | B=0°           | B=3.9°                                  | B=7.9°         | B=12.7°        |
| \(\frac{x}{C_{\mathbf{V}}}\) |                | Z              | by = 0.1       | <del></del>                                    |                            | ·  |                | $b_V = O$ .                             | 38             | I/             |
| ~                            |                |                | <u> </u>       | <u>,                                      </u> | Left s                     | ide  |                |   |                |                |
|                              |                | 400            | 430            | . 421  | •104                       | .612   | - 0 ^ 4        | -400                                    | -264           | 090            |
| .000<br>.025                 | .819<br>.277   | -688<br>060    | -629<br>-452   | 920  | 819                        | ●334   | 806<br>073     |   | -1.220         | 563            |
| 075                          | •151           | 094            | 374            | 729  | 682                        | •156   | 141            | 686<br>394                              | -1.114         | 559            |
| 150                          | •039           | 158<br>126     | 375<br>256     | ~•653<br>~•536                                 | -•627<br>-•548             | -067<br>-010                                     | ~•151<br>~•168 | 271                                     | -1.018<br>689  | 552            |
| • 250<br>• 350               | 039            | 146            | - 202          | 308  | 494                        | 091  | 224            | 266                                     | 138            | 534            |
| 450                          | 115            | 201            | 205            | 176  | 469                        | 189  | 297            | 275                                     | 164            | 497            |
| <b>•</b> 550                 | 151            | 227            | 165            | 127  | -+426                      | 224  | 341            | -•236                                   | 180            | - • 454        |
| •650                         | 153            | 196            | 107            | 105  | 375                        | -•264<br>-•224                                   | 352<br>137     | 170<br>095                              | 163<br>131     | 418<br>363     |
| ●750<br>●850                 | 135<br>043     | 102<br>.014    | 039<br>.029    | 075<br>019                                     | 319<br>254                 | 066  | •034           | 002                                     | 073            | 321            |
| 900                          | 011            | •065           | .066           | •016   | 209                        | •007   | .089           | •051                                    | 030            | 275            |
|                              |                |                | •              |  | Right                      | side   |                |   |                |                |
| •025                         | 334            | •023           | •331           | •603   | .838<br>.579               | 885  | 036            | •368<br>•171                            | •611           | •772           |
| ■075                         | 412            | 094            | •147           | •372<br>•242                                   | .579<br>.417               | 637<br>396                                       | -0121<br>-0134 | •171                                    | .385<br>.256   | •565<br>•416   |
| •150<br>•250                 | -•370<br>-•268 | -•126<br>-•117 | •064<br>•023   | •171   | 313                        | 270  | -155           | 002                                     | •151           | 296            |
| •350                         | - 228          | 153            | 041            | •079   | •205                       | 269  | 205            | 070                                     | .064           | .200           |
| .450                         | 216            | 192            | 104            | 011  | .093                       | 273  | 277            | 153                                     | 034            | .085           |
| •550                         | 172            | 215            | 148            | 061  | •032                       | 250  | 320            | 206                                     | 098            | •007           |
| •650                         | 107            | 168            | 137            | 072  | ~•00B                      | 172  | -,293<br>-,130 | -•231<br>-•100                          | 142            | 048<br>082     |
| •750<br>•850                 | -•042<br>•033  | -•085<br>•027  | 119<br>021     | 093<br>038                                     | -•042<br>-•049             | -•084<br>•007                                    | -•120<br>•053  | 189<br>054                              | 154<br>100     | ~.096          |
| 900                          | 1062           | •067           | •012           | 019  | 069                        | •041   | .080           | 001                                     | 072            | 132            |
|                              |                |                | by = 0         |  |                            | <del>                                     </del> | Z/b.           | ,=0.93                                  | ,              |                |
|                              |                |                |                |  | Left                       | s ide  |                | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | <u>:</u>       |                |
| .000                         | 4592           | •821           | •656           | •323   | 056                        | •780   | •912           | •708                                    | •368           | 090            |
| 025                          | •389           | 071            | 984            | -1.219   | 592                        | .464   | 168            | 796                                     | 779            | 455            |
| .075                         | •217           | 114            | 830            | -1.079   | 598                        | •172   | 427            | 271                                     | 298            | 377            |
| <b>•150</b>                  | ●096           | 151            | 428            | 850  | 612                        | ~•086  | 497            | 271                                     | 289            | 361            |
| •250                         | •002           | -•205          | 172            | 517  | 603                        | 133  | 472            | 272                                     | -•289          | 363            |
| •350<br>•450                 | 119            | 322<br>438     | 240<br>300     | -•371<br>-•299                                 | 603<br>539                 |  |                |   |                |                |
| .550                         | - 359          | 511            | 275            | 244  | ~.435                      |  |                |   |                |                |
| •650                         | 414            | 529            | 223            | 248  | 411                        | 642  | 277            | 277                                     | 316            | 402            |
| •750                         | 380            | 094            | 178            | 273  | 419                        | 520  | 199            | -•284                                   | 327            | 409            |
| •850                         | 144            | •040           | 136            | 290  | 417<br>413                 | 135  | -•081<br>-•023 | 266<br>246                              | -•318<br>-•311 | -•387<br>-•375 |
| •900                         | 056            | •080           | 104            | <b>-</b> ,289                                  |                            | 103  |                |   | -0311          | - 4313         |
| .025                         | -1.003         | 006            | •433           | •655   | Right                      | -•719  | 044            | •508                                    | •797           | •975           |
| 075                          | 792            | 098            | 221            | • 635<br>• 435                                 | • 15 <del>9</del><br>• 599 | 301  | 445            | 162                                     | 455            | 675            |
| •150                         | 301            | 117            | .121           | •307   | .464                       | 294  | 410            | 038                                     | •213           | •418           |
| • 250                        | 222            | -•198          | •010           | •180   | • 337                      |  |                |   |                |                |
| • 350                        | 277            | 312            | -•103<br>-•226 | •053<br>-•072                                  | •207<br>•069               |  |                |   |                |                |
| .450<br>.550                 | 275            | 401<br>458     | 328            | 175  | 046                        |  |                |   |                |                |
| .650                         | 220            | 426            | 378            | 254  | 133                        | 264  | 254            | 617                                     | 495            | 281            |
| •750                         | 180            | 088            | 410            | 319  | 213                        | 291  | 187            | 478                                     | 512            | 343            |
| •850<br>000                  | 112            | •072           | 109            | 265  | 165                        | 268<br>241                                       | 085<br>024     | -•133<br>-•099                          | 270<br>168     | 198<br>224     |
| •900                         | 084            | •098           | 027            | 186  | 185                        |  | -1027          |   | -1100          | - 1224         |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  =  $0^{\circ}$  - Continued (k)  $\alpha$  =  $9^{\circ}$ ; M = 0.60

|                   |               |                | Cp             | for-           |                |              |               | Cp for       | _                |               |
|-------------------|---------------|----------------|----------------|----------------|----------------|--------------|---------------|--------------|------------------|---------------|
| y .               | B=-3.9        | B=0°           | B=3.9°         | B=7.9°         | B=12.7°        | B=-3.9°      | B=0°          | B=3.9°       | B=7.9            | B=12.70       |
| $\frac{x}{C_{v}}$ | <del></del>   | 1              | by = 0.1       |                | <u> </u>       |              |               | by = 0.      | <del>3</del> 8   |               |
| -V                |               |                | <u> </u>       | <u></u>        | Left s         | ide          |               |              |                  |               |
| <del></del>       | 1.70          | 000            |                | - 024          |                | 4018         | .444          | 096          | -1 -036          | -1.402        |
| •000<br>•025      | -472<br>-4085 | -822<br>108    | 048            |                | -1.140<br>925  | e 366        | -•029         | 768          | -1.036<br>-1.294 | -1.161        |
| •075              | •041          | 101            | 163            | 395            | 631            | •210         | 050           | 402          | -1.402           | -1 -127       |
| •150              | •055          | 115            | 200            | 342            | 480<br>331     | •137         | 060<br>060    | 265<br>214   | 381<br>243       | -1.108<br>796 |
| •250<br>•350      | ±055          | 085<br>076     | 138<br>133     | -•234<br>-•192 | -•276          | •038         | 078           | 194          | 243              | 480           |
| 450               | 004           | 090            | 133            | 167            | 246            | •011         | 092           | 170          | 206              | 347           |
| ●550              | 001           | 078            | 110            | 130            | 216            | •013         | 060           | 124          | 151              | 296           |
| •650              | •016          | 039            | 059            | 091            | 175            | •018         | 039           | 082          | 107              | 267           |
| •750              | •029          | 016            | 025            | -•036<br>•024  | -•136<br>-•058 | •036         | ∙003<br>•066  | 041<br>.040  | 059<br>.004      | 228<br>157    |
| •850<br>•900      | ■057<br>■075  | •024<br>•047   | .029<br>.054   | ±024<br>±056   | 007            | 096          | •091          | 4077         | •043             | 111           |
| 1,000             |               | •041           |                |                | Right          | side         |               |              |                  | <del></del>   |
| •025              | •027          | 064            | 020            | •211           | •717           | 601          | 002           | •422         | •577             | •660          |
| 075               | 163           | 122            | 047            | •204           | .541           | 356          | 036           | •239         | .405             | •536          |
| •150              | 186           | 104            | .06B           | <b>ĕ211</b>    | .424           | 255          | 046           | a156         | •292             | •417          |
| •250              | 140           | 081            | <b>₽968</b>    | •213           | •343           | 195<br>175   | 050<br>057    | ∙098<br>•063 | •211<br>•160     | •321<br>•254  |
| •350              | 138<br>134    | 076<br>085     | •040<br>•015   | •170<br>•123   | •254<br>•183   | 159          | 062           | •029         | 103              | 174           |
| +450<br>+550      | 101           | 074            | •008           | •100           | •149           | 120          | 053           | •019         | •077             | .132          |
| 650               | 058           | 041            | .017           | .091           | •128           | 072          | 027           | •029         | .068             | •103          |
| •750              | 021           | 006            | .040           | .087           | •110           | 017          | •024          | •052         | •073             | •080          |
| 850               | •038          | •038           | •070           | •112           | .114           | •052<br>•075 | .080<br>.084  | •093<br>•100 | •100<br>•091     | •077<br>•050  |
| •900              | •061          | •049           | •089           | •114           | •112           | 10/3         |               |              |                  |               |
|                   |               | 2/             | $b_{V} = 0.$   | 66             |                | <u> </u>     | 2/0           | v =0.93      | <del></del>      |               |
|                   |               |                |                |                | Left           | s ide        |               |              |                  |               |
| •000              | 040           | •604           | 117            | 683            | 918            | •337         | •799          | -+214        | 404              | 425<br>397    |
| •025              | •412          | 036            | 872            | 883            | 615            | •662         | •059<br>-•034 | 925<br>849   | 446<br>436       | -4411         |
| •075              | •270          | 041<br>041     | -•552<br>-•316 | ~•849<br>~•805 | -•608<br>-•590 | •449         | 076           | 714          | 413              | 407           |
| •150<br>•250      | •183<br>•130  | 039            | 235            | 674            | 560            | 137          | 048           | 471          | 381              | 402           |
| 350               | •084          | 062            | 210            | 457            | 540            |              |               |              |                  |               |
| 450               | •041          | 078            | 194            | 273            | 503            |              |               |              |                  |               |
| •550              | •006          | 081            | 157            | 185            | 455            | 019          | 060           | 096          | 234              | 345           |
| €650<br>€750      | •013<br>•036  | -•046<br>-•002 | -•099<br>-•032 | 137<br>100     | -•423<br>-•381 | •009         | 013           | 032          | 206              | 331           |
| 850               | •036<br>•055  | 002<br>.045    | •024           | 068            | 349            | •036         | •033          | •031         | 178              | 308           |
| 900               | 4075          | •073           | •059           | 042            | 333            | •057         | •059          | •061         | 162              | 299           |
|                   |               |                |                |                | Right          | tside        |               |              |                  |               |
| •025              | -4792         | •024           | •457           | •607           | +655           | 962          | •121          | •718<br>•478 | •872             | •963          |
| ●075              | 386           | 018            | .290           | 451            | •568           | 716          | •010          |              | •651<br>•437     | •802<br>•580  |
| •150              | 257           | 016            | •212           | #349<br>• 280  | •474<br>•392   | 689          | 025           | •281         | • 4 3 /          | 1960          |
| • 250<br>• 350    | 218           | 027<br>048     | •156<br>•093   | .280<br>.195   | • 291          |              |               |              |                  |               |
| 450               | 186           | 067            | .056           | 133            | .210           | 1            |               |              |                  |               |
| •550              | 154           | 062            | •017           | .077           | •130           |              |               |              |                  |               |
| •650              | 092           | 036            | •015           | •047           | •068           | 085          | 064           | •003         | •015             | 005<br>099    |
| •750              | -•028         | -•009          | •040           | •045           | •025<br>- 00#  | 019          | 011<br>.063   | •003<br>•066 | 031<br>022       | 099<br>136    |
| .850<br>.900      | •048          | .084<br>.093   | •091<br>•098   | .064<br>.068   | 005<br>046     | •059         | a065          | •087         | 038              | <b>→•182</b>  |
| . 900             | •077          | • • • • •      | • 4 70         | •000           |                | 1            |               |              |                  |               |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued (i)  $\alpha=9^\circ$ ; M = 0.80

|                                      | Cp for-                         |            | <del>                                     </del> |                | Cp for                                | _                |                  |
|--------------------------------------|---------------------------------|------------|--|----------------|---------------------------------------|------------------|------------------|
| x B=-3.94 B=0                        |                                 | 9º B=12.7º | R=-39  | · B =0°        | B=3.9°                                |                  | B=12.7°          |
| 7 7 7                                | /by = 0.11                      | <u> </u>   | <del>                                     </del> | Ľ              | $b_{\nu} = 0.$                        | 17-              | D-IE.            |
| -                                    | 700 - 0.11                      | 1 - 44     | <u> </u>   |                | Dy - U.                               | 50               |                  |
|                                      |                                 | Left :     | s ide  |                | <del></del>                           |                  |                  |
| .000 .479 .890<br>.025107108         | •596 •23!<br>•022 <b>-</b> •36! |            | •276<br>•379                                     | •692<br>-•032  | 837                                   | 402              | 970              |
| •075                                 | 141389                          |            | 224  | 058            | 424                                   | -1:294<br>-1:279 | 976<br>991       |
| •150 •065 -•116                      | 219377                          | 7 ~•493    | •148   | 054            | 267                                   | 647              | 947              |
| •250 •064 −•086                      | 152253                          |            | •099   | 058            | 215                                   | 211              | 807              |
| •350   •040 -•073                    | 151202                          |            | •050   | 081            | 207                                   | 236              | 568              |
| •450 •011 -•095<br>•550 •002 -•078   | 155181<br>118138                |            | •017   | -•099<br>-•072 | 192<br>143                            | 210<br>156       | 399<br>318       |
| •650 •012 -•041                      | 063081                          |            | 020  | 046            | 089                                   | 109              | 288              |
| •750 •029 -•019                      | 027041                          |            | •040   | •004           | 027                                   | 060              | 251              |
| •850 •069 •032                       | •033 •011                       |            | •090   | .074           | •050                                  | •003             | 193              |
| •900 •096 •065                       | •065 •060                       |            | •117   | •111           | •093                                  | •046             | 146              |
|                                      |                                 | Right      | side   |                | <del></del>                           |                  |                  |
| •025 •102 -•041                      | 044 .220                        |            | 674  | •027           | •433                                  | •585             | •690             |
| •075 -•132 -•116<br>•150 -•184 -•093 | .050 .212                       |            | 350<br>242                                       | 026<br>032     | •2 <b>47</b><br>•166                  | •411<br>•305     | .559<br>.446     |
| .250137069                           | •079 •193                       |            | -190   | 038            | •115                                  | •233             | 353              |
| •350145073                           | .048 .158                       |            | 180  | 054            | •079                                  | •170             | 279              |
| •450 <b>-•148 -•092</b>              | •015 •117                       |            | 169  | 067            | •042                                  | •109             | .201             |
| •550 -•107 -•075                     | •008 •099                       |            | 131  | 060            | •025                                  | •077             | •148             |
| •650   -•058   -•046                 | •022 •081                       |            | 072  | ~•029          | •030                                  | •063             | •110             |
| •750 -•014 -•014<br>•850 •050 •045   | .033 .080                       |            | 001<br>.075                                      | ∙020<br>•096   | •059<br>•105                          | •062<br>•092     | •079<br>•064     |
| 900 1079 058                         | •094 •106                       |            | 108  | •10B           | •105                                  | •083             | •027             |
|                                      | 7/by = 0.66                     |            |  |                | ,=0.93                                |                  |                  |
|                                      |                                 | Left       | side   | <u>`</u>       |                                       |                  |                  |
| •000 •219 •655                       | •167 -•303                      | -4811      | •562   | •878           | •187                                  | ~.110            | 638              |
| .025 .423023                         | 808714                          |            | 677  | •020           | 849                                   | 432              | 393              |
| •075 •288 -•032                      | 592689                          |            | •470   | 063            | 741                                   | 395              | - 402            |
| •150 •213 -•032                      | 339632                          |            | •247   | 115            | 710                                   | 357              | 400              |
| •250 •169 -•031                      | 24157                           |            | •140   | 078            | 600                                   | 342              | - • 394          |
| •350 •104 -•064<br>•450 •041 -•096   | 238512<br>229382                |            |  |                |                                       |                  |                  |
| •550 •002 -•101                      | 186260                          |            |  |                |                                       |                  |                  |
| •650 •005 -•063                      | 109181                          |            | 037  | 069            | 076                                   | 224              | 361              |
| •750 •032 -•002                      | 027139                          |            | 005  | 003            | 007                                   | 205              | 349              |
| •850 •065 •062                       | •042 -•110                      |            | +040   | •067           | •054                                  | 191              | 332              |
| •900 •090 •088                       | .079096                         |            | .069   | •100           | •086                                  | 179              | 321              |
|                                      |                                 | Right      | T  |                | · · · · · · · · · · · · · · · · · · · |                  |                  |
| •025 -•799 •064<br>•075 -•425 •007   | •475 •626<br>•310 •477          | •706       | 892  | :364           | •742                                  | .904<br>.677     | 1 • 030<br>• 851 |
| •150 -•231 •009                      | •310 •477<br>•241 •379          |            | 644  | 022            | ∎496<br>∎296                          | •677<br>•451     | 624              |
| .250215014                           | 178 309                         |            |  | •021           | 14.70                                 | •                | •02              |
| ●350 -●222 -●044                     | •115 •217                       | 332        |  |                |                                       |                  |                  |
| •450204075                           | .053 .133                       |            |  |                |                                       |                  |                  |
| •550 -•158 -•081                     | •010 •074                       |            | 1  | . 623          | 414                                   |                  | ^~~              |
| •650 -•085 -•054<br>•750 -•011 -•017 | •015 •036                       |            | •015   | 031<br>.003    | 010                                   | 020              | ~.008            |
|                                      |                                 |            |  |                |                                       |                  |                  |
| •850 •082 •105                       | .034 .013                       |            | 087  | •087           | •001<br>•062                          | 081<br>081       | -•125<br>-•184   |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  =  $0^\circ$  - Continued (m)  $\alpha$  =  $9^\circ$ ; M = 0.85

|                   |               |            | Cp           | for-         |                |              | 1                     | Cp for        | _             |               |
|-------------------|---------------|------------|--------------|--------------|----------------|--------------|-----------------------|---------------|---------------|---------------|
| $\frac{x}{C_{V}}$ | B=-3.9        | B=0°       | 1/           | B=7.9°       | B=12.7°        | B=-3.9°      | B=0°                  | B=3.9°        | B=7.9°        | B=127         |
| Cv                |               | Z/         | bv = 0.1     | 1            |                |              | Z/                    | by = 0.3      | 38            |               |
|                   |               |            |              |              | Left s         | ide          | <u>`</u> _            |               |               |               |
| •000              | •478          | •901       | •287         | •274         | 384            | •327         | •707                  | 233           | 260           | 947           |
| •025<br>•075      | 124<br>-036   | 109<br>105 | 321<br>377   | 334<br>388   | 648<br>611     | •370<br>•219 | 041                   |               | -1.308        | - • 938       |
| •150              | •060          | -•121      | 407          | 422          | 517            | 149          | 065<br>064            | ~.719         | -1.152<br>766 | 921<br>912    |
| 250               | •063          | -4094      | 271          | 281          | 382            | 097          | 067                   | - 234         | 267           | - 911         |
| .350              | •032          | 084        | 214          | 225          | 328            | 048          | 089                   | 264           | 277           | 512           |
| <b>+450</b>       | •000          | 104        | 200          | 213          | 291            | •009         | 109                   | 246           | 257           | 431           |
| •550              | 008           | 087        | 164          | 173          | 238            | •006         | 087                   | 199           | 213           | 336           |
| •650              | 001           | 048        | 119          | 131          | 204            | •009         | 057                   | 159           | 175           | <b>-</b> •296 |
| •750              | •018          | 029        | 079          | 091          | 168            | •029         | 008                   | 109           | <b>12</b> 2   | 259           |
| .850              | •060          | •032       | 004          | 017          | 108            | •080         | •073                  | 032           | 044           | <b>20</b> 2   |
| •900              | •089          | •063       | •042         | •031         | -•053          | 109          | •112                  | •019          | 004           | -•151         |
|                   |               |            |              |              |                | side         |                       |               |               |               |
| ●025<br>●075      | •122<br>-•136 | 042<br>118 | •212<br>•210 | •209<br>•212 | ∙547<br>•473   | 806<br>365   | •035<br><b>-•</b> 027 | •588<br>•410  | •594<br>•415  | •697<br>•564  |
| •150              | 202           | 099        | •183         | 185          | •433           | 253          | 035                   | •310          | 305           | •354<br>•451  |
| 250               | 154           | 072        | 190          | 193          | •378           | - 204        | 044                   | •236          | .236          | 358           |
| .350              | 161           | 077        | •157         | •156         | 290            | -192         | 058                   | •173          | 170           | 291           |
| 450               | 168           | 101        | .109         | •105         | 209            | 191          | 077                   | •110          | 105           | 212           |
| •550              | -6128         | 082        | .088         | .084         | .165           | 151          | 072                   | .075          | •068          | .158          |
| .650              | 071           | 051        | •073         | .068         | •126           | ~.091        | 038                   | .056          | •050          | .115          |
| .750              | 025           | 021        | •076         | <b>●</b> 065 | •108           | 011          | •009                  | • 052         | •047          | •085          |
| 850               | ●042          | •040       | •096         | •088         | •103           | •069         | •093                  | •072          | •064          | •062          |
| • 900             | •072          | •063       | •095         | 880.         | •089           | •103         | •106                  | •065          | •051          | •025          |
|                   |               | 2/         | $b_V = 0.0$  | 66           |                |              | z/b                   | ,=0.93        |               |               |
|                   |               |            |              |              | Left           | s ide        |                       |               |               |               |
| •000              | •270          | •672       | 184          | 212          | 749            | .624         | •888                  | 062           | 104           | 615           |
| •025              | <b>#426</b>   | 028        | 636          | 645          | 679            | <b>∙68</b> 2 | 015                   | 499           | 523           | 413           |
| •075              | •287          | 035        | 616          | 627          | 625            | ●468         | 081                   | 417           | 415           | 416           |
| .150              | •212          | 035        | 563          | <b>582</b>   | ~.588          | •239         | 139                   | 367           | 371           | 411           |
| •250<br>•350      | •166<br>•096  | 038        | 482          | 494          | 554            | •136         | 101                   | <b>~</b> •358 | 367           | 410           |
| • 450             | •032          | 081<br>116 | 434<br>401   | 436<br>399   | 524            |              |                       |               |               |               |
| •550              | 018           | 124        | 401<br>355   | 361          | -•497<br>-•460 |              |                       |               |               |               |
| •650              | 019           | 081        | 304          | -1315        | 430            | 065          | 084                   | 327           | 342           | 374           |
| €750              | 012           | 015        | 249          | 271          | 410            | 029          | 014                   | 297           | 323           | - 362         |
| .850              | •052          | •055       | 186          | 213          | 384            | 022          | •070                  | 251           | -+283         | 347           |
| • 900             | •079          | •093       | 153          | 198          | 373            | •050         | •103                  | 226           | 260           | 336           |
|                   |               |            |              |              | Right          | side         |                       |               |               |               |
| •025              | 850           | •072       | •632         | •638         | •722           | 855          | •159                  | •915          | •919          | 1.045         |
| •075              | 453           | •018       | •485         | •486         | •627           | 640          | 007                   | •686          | •686          | .866          |
| •150<br>•250      | -+236         | •016       | .387         | •389         | •532           | 631          | -•027                 | •45 <u>9</u>  | •457          | •640          |
| •250<br>•350      | 221           | 018<br>052 | •316<br>•222 | •312<br>•221 | •455<br>•351   |              |                       |               |               |               |
| • 450             | 238           | 032<br>089 | •222<br>•140 | •221<br>•138 | •251           |              |                       |               |               |               |
| •550              | 185           | 098        | •066         | 062          | 160            |              |                       |               |               |               |
| •650              | 105           | 068        | .024         | •018         | •086           | 055          | 048                   | ~•039         | 044           | 013           |
| •750              | 022           | 022        | 008          | 019          | •020           | •000         | •003                  | 116           | 129           | 111           |
| a850              | •070          | •103       | .008         | 007          | 026            | .068         | •095                  | 116           | 135           | 165           |
| a 900             | •107          | .120       | 002          | 024          | 080            | .099         | •129                  | 146           | 178           | 244           |

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWAFD POSITION;  $i_t$  = 0° - Continued (n)  $\alpha$  = 9°; M = 0.90

|                  |                |                | Cp             | for-             | <del></del>    | Γ                     |                |                |                 |              |
|------------------|----------------|----------------|----------------|------------------|----------------|-----------------------|----------------|----------------|-----------------|--------------|
|                  | 0- 30          | B:0°           |                |                  | T 4            |                       |                | Cp for         |                 | <b>_</b>     |
| x C <sub>v</sub> | B = -3.9       |                |                | B=7.9°           | B=12.7°        | B=-3.9°               | B=0°           | B=3.9°         | B=7.9°          | B=1270       |
| \ \frac{C_V}{V}  |                |                | bv = 0.1       | //               |                |                       | Z/             | $b_V = O$ .    | <del>3</del> 8  |              |
| <u></u>          | <u>.</u>       |                |                |                  | Left s         | ide                   |                |                |                 |              |
| •000<br>•025     | •496           | •926           | -618           | •340             | ~.417          | •369                  | •712           | 9040           | 078             | 723          |
| •075             | 115            | -•117<br>-•116 | .080<br>111    | -•262<br>-•333   | 518<br>554     | •380<br>•228          | 053<br>080     | -•978<br>-•426 | -1+355          | 980<br>935   |
| •150             | •070           | 135            | 238            | 424              | 585            | •157                  | 077            | 268            | -1+042<br>-+489 | 935<br>888   |
| • 250            | •072           | 107            | 160            | <b>~</b> • 285   | 382            | 109                   | 078            | 207            | 332             | 795          |
| • 350            | +041           | 096            | 152            | 214              | 348            | •056                  | 105            | 204            | 272             | 632          |
| •450<br>•550     | •012<br>•005   | 125<br>111     | 166<br>132     | 201<br>165       | -•329<br>-•274 | •019<br>•012          | 140            | 198            | 242             | 480          |
| 650              | 012            | 072            | 081            | 123              | 235            | •012                  | -•120<br>-•092 | 158<br>111     | 205<br>170      | 384<br>337   |
| .750             | •021           | 052            | 043            | 084              | 201            | •034                  | 036            | 048            | 119             | 293          |
| <b>850</b>       | •066           | •013           | •019           | 013              | 130            | •087                  | .054           | .036           | 047             | 235          |
| ■900             | ♦095           | <b>.046</b>    | •060           | •032             | -•091          | e115                  | •099           | •084           | •005            | 188          |
|                  |                |                |                |                  | Right          | side                  |                |                |                 |              |
| •025<br>•075     | +148<br>-+118  | 048<br>134     | 059<br>.042    | •203             | .484           | 839                   | •028           | •431           | •592            | •710         |
| 150              | -+118          | 111            | 079            | •210<br>•189     | +486<br>+455   | 348<br>244            | -•037<br>-•044 | •250<br>•171   | •414<br>•312    | •568         |
| •250             | 140            | 089            | 082            | 186              | 391            | 188                   | 054            | •122           | •241            | •458<br>•366 |
| •350             | -+146          | 089            | .046           | .155             | •296           | 179                   | 074            | •080           | 182             | 4299         |
| •450             | 156            | 113            | •007           | .108             | •210           | 178                   | 099            | .031           | .114            | .218         |
| +550             | 112            | 097            | •002           | •088             | <b>165</b>     | 143                   | 096            | •008           | •071            | ·159         |
| •650<br>•750     | 059<br>016     | 074<br>042     | 001<br>.020    | •072             | •119           | 082                   | 070            | •007           | •051            | •119         |
| 850              | ◆058           | •028           | •063           | ●064<br>●087     | •096<br>•089   | •002                  | -•015<br>•081  | •030           | •045            | •080         |
| •900             | •086           | •04B           | .079           | .084             | •067           | •081<br>•1 <b>0</b> 9 | •093           | ∙076<br>•084   | ∙060<br>•045    | .053<br>.010 |
|                  |                | 2/             | $b_v = 0$      | 66               |                |                       | Z/b.,          | -0.93          |                 |              |
|                  |                |                |                |                  | Left           | s ide                 |                |                | <del></del> .   |              |
| •000             | •307           | •680           | •318           | 123              | <del>677</del> | •554                  | •913           | e457           | -+025           | 510          |
| •025             | ·437           | 033            | 982            | 706              | 720            | •687                  | 019            | 711            | 758             | 452          |
| ●075             | •305           | 038            | 563            | 657              | 653            | •476                  | 107            | 397            | 357             | -4460        |
| •150             | •226           | 042            | 260            | 594              | 612            | • 243                 | 174            | 358            | 328             | 449          |
| •250<br>•350     | •179<br>•108   | 056<br>111     | ~•187<br>-•198 | 482<br>392       | 586            | •140                  | 128            | 350            | 324             | 451          |
| .450             | •035           | 158            | 218            | 327              | 546<br>526     |                       |                |                |                 |              |
| 4550             | 015            | 174            | 210            | 272              | -495           |                       |                |                |                 | į            |
| •650             | 018            | 131            | 153            | -+249            | 471            | ~.065                 | 123            | 240            | 352             | -4417        |
| •750             | •010           | 045            | 087            | 244              | 448            | 030                   | 029            | 196            | 353             | 404          |
| <b>850</b>       | •056           | •040           | 014            | 216              | 424            | •017                  | •058           | 137            | 327             | 386          |
| •900             | •081           | •076           | •028           | <b>-</b> •195    | 416            | •042                  | •093           | 101            | 308             | 374          |
|                  |                |                |                |                  | Right          | side                  |                |                |                 |              |
| ●025<br>●075     | -•840<br>-•437 | •069<br>•010   | .483<br>.321   | • 643<br>• 494   | •736<br>•638   | 794<br>575            | 154            | • 732          | 930             | 1.061        |
| 150              | 217            | •009           | •253           | • <del>402</del> | •540           | 560                   | 040<br>050     | •484<br>•285   | ⊪697<br>⊪470    | 882          |
| • 250            | 204            | 026            | 190            | 329              | •466           | - 200                 | -1030          | 1407           | · = / U         | •651         |
| •350             | 232            | 078            | .118           | .232             | •360           |                       |                |                |                 | - [          |
| •450             | -+234          | 124            | .042           | .142             | •262           |                       |                |                |                 |              |
| a550             | 186            | 147            | 020            | •062             | •167           |                       |                |                |                 | ł            |
| •650<br>•750     | 104<br>016     | 121<br>062     | 040<br>028     | •011<br>-•027    | •089           | 066                   | 076            | 071            | 059             | •010         |
| 850              | •083           | -1082<br>-089  | 028<br>-036    | 027              | -016           | -•009<br>•059         | 025<br>-084    | -•095<br>-•047 | 134             | 097          |
| •900             | •118           | •108           | .056           | 032              | ~•078          | •091                  | •115           | 041            | 134<br>186      | 132          |
|                  |                |                |                |                  |                |                       |                |                |                 | 1200         |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  =  $0^{\circ}$  - Continued (o)  $\alpha$  =  $9^{\circ}$ ; M = 0.92

|                    |                |                | Cp           | for-           | ······································ |            |                | Co for       | · _                  | 1             |
|--------------------|----------------|----------------|--------------|----------------|--|------------|----------------|--------------|----------------------|---------------|
|                    | R=-39          | B=0°           |              | B=7.9          | B=12.7°                                | A= 30      | B =0°          | B=39         |                      | o B=1270      |
| X   C <sub>V</sub> | 0.5            |                | /~           | /              | D-12.7                                 | p5.9       |                | 1/           | 1/                   | B=12.7°       |
| ~                  |                |                | by = 0.1     | '/             |  | <u> </u>   | z/             | $b_V = 0$    | <i>38</i>            |               |
|                    | <u> </u>       |                |              |                | Left s                                 | ide        |                |              |                      |               |
| •000               | •491           | .935           | .621<br>.086 | <b>346</b>     | 383                                    | .41b       | 716<br>037     | - 990        | 022                  | -1:873        |
| 025                | 143            | 101            |              | 248<br>325     | 481<br>531                             | •374       | 037<br>069     | 428          | -1#340<br>-#964      | -1.013<br>959 |
| •075<br>•150       | ●028<br>●059   | -•102<br>-•125 | 106<br>247   | 437            | -e583                                  | 148        | 065            | 277          | 586                  | 887           |
| 250                | 057            | 095            | 169          | - 319          | 405                                    | 100        | 069            | 211          | 374                  | 789           |
| .350               | •032           | 084            | 162          | 239            | 342                                    | .045       | 095            | 211          | 329                  | -•629         |
| #450               | 006            | 117            | 176          | -+231          | 336                                    | 001        | 136            | -+204        | -•271                | -+487         |
| 6550               | -•021          | 108            | 143          | 191            | 278                                    | 013        | -• 122         | 172<br>124   | 229<br>194           | 397<br>358    |
| •650<br>•750       | 016            | 071<br>046     | 091<br>052   | 148<br>111     | -•253<br>-•219                         | 022        | 096<br>035     | 061          | 145                  | ~.313         |
| •850               | •044           | •020           | •008         | 037            | 154                                    | -0000      | •060           | •028         | 069                  | - 253         |
| 900                | •078           | .059           | .047         | 009            | 105                                    | •090       | .106           | •074         | 021                  | ~.204         |
|                    |                |                |              |                | Right                                  | side       |                |              |                      |               |
| •025               | •163           | 031            | -,077        | .183           | 1464                                   | 872        | •035<br>-•027  | •420         | •581                 | •713          |
| •075               | 112            | 122            | .029         | 191            | 481                                    | 355        |                | •242         | 400<br>296           | •571          |
| •150               | 212            | 096            | •070         | 176            | +458<br>+396                           | 259<br>195 | -•033<br>-•040 | •161<br>•111 | •276                 | •458<br>•367  |
| •250<br>•350       | 159<br>166     | 074<br>074     | •071<br>•037 | •167<br>•138   | • 298                                  | 185        | 062            | •073         | •171                 | 298           |
| •450               | 173            | 108            | .002         | •095           | 213                                    | -189       | 091            | •024         | 101                  | •219          |
| •550               | 133            | 089            | 007          | .070           | •168                                   | 164        | 102            | 003          | .062                 | -163          |
| e650               | 081            | 070            | 013          | .055           | •118                                   | 105        | 072            | 006          | .037                 | •117          |
| •750               | 038            | 041            | .008         | •047           | •097                                   | 026        | 018            | •015         | •025                 | •080          |
| •850               | •036           | •032           | •052         | •068           | •083                                   | +057       | •082           | •064<br>•073 | •039<br>•024         | •050          |
| •900               | •062           | •056           | •070         | •062           | •061                                   | •092       | •102           |              |                      | •005          |
| •                  |                | 2/             | $b_{V} = 0.$ | 66             |  |            | 2/0            | y =0.93      | 5                    |               |
|                    |                |                |              |                | Left                                   | s ide      |                |              |                      |               |
| •000               | •353           | •692           | .347         | 088            | 649                                    | •723       | .922           | .489         | •007                 | 593           |
| ●025               | •430           | 017            | -1.015       | 804            | ~.734                                  | +684       | •011           | 701          | 845                  | 469           |
| ●075               | €298           | 027            | 546          | 721            | 658                                    | •463       | 105            | 371          | 383                  | 471           |
| +150               | •223           | 030            | 261          | 643            | 616                                    | •228       | 173            | 344          | 354                  | 462<br>465    |
| •250               | •162<br>•092   | 041            | 187          | 528            | 592<br>556                             | •123       | 110            | 338          | 351                  | -4465         |
| • 350<br>• 450     | 012            | 102<br>157     | 198<br>229   | 401<br>322     | 531                                    | ļ          |                |              |                      | l             |
| 550                | 052            | 179            | 220          | 274            | 506                                    |            |                |              |                      | Ţ             |
| .650               | 068            | 143            | 166          | 261            | 481                                    | 135        | 128            | 245          | 377                  | 430           |
| •750               | 042            | 041            | 102          | 258            | 465                                    | 105        | 027            | 214          | 386                  | 417           |
| .850               | •007           | •045           | 030          | 236            | 440                                    | 075        | •067           | 165          | -1365                | 401<br>395    |
| •900               | •033           | •086           | •010         | 221            | 433                                    | 062        | •106           | 133          | 347                  | -0393         |
|                    |                |                |              |                | Right                                  | T          |                |              |                      | 1 070         |
| •025<br>•075       | -•956<br>-•397 | •084<br>•025   | .480<br>.313 | •639<br>•482   | •742<br>•641                           | 650<br>380 | 032            | •727<br>•476 | •9 <b>30</b><br>•690 | 1.070         |
| 150                | 192            | •025<br>•025   | •252         | • 394          | •547                                   | 363        | 046            | •278         | •457                 | 658           |
| 250                | 172            | 014            | .182         | •316           | +469                                   |            |                |              |                      | - 1           |
| • 350              | 208            | 061            | .106         | .223           | <b>•364</b>                            |            |                |              |                      | i             |
| • 450              | -+229          | 118            | .031         | •126           | • 265                                  |            |                |              |                      | J             |
| •550               | 209            | 147            | 035          | •043           | .166                                   | 107        | 078            | 097          | 079                  | .016          |
| •650<br>•750       | 141            | 128<br>071     | 060<br>051   | -:016<br>-:049 | •090<br>•017                           | 197<br>159 | 010            | 118          | 153                  | - 098         |
| 850                | •027           | •097           | •020         | 030            | 020                                    | -1112      | •089           | 069          | 145                  | 123           |
| 900                | .065           | •116           | .039         | 057            | 075                                    | 073        | .119           | 073          | 203                  | 193           |
|                    |                |                |              |                |  | <u> </u>   | <del></del>    |              |                      |               |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t$  =  $0^{\circ}$  - Continued (p)  $\alpha$  = 15.1°; M = 0.60

|                   |              |                | Cp             | for-         | ·              |              |                      | Co for         | · <b>_</b>     |                  |
|-------------------|--------------|----------------|----------------|--------------|----------------|--------------|----------------------|----------------|----------------|------------------|
| $\frac{x}{C_{v}}$ | B=-3.9       | \$ :0°         |                | B=7.9        | B=12.70        | B=-3.9°      |                      | B= 3.9         |                | B=1270           |
| $c_{\mathbf{v}}$  |              | Z              | bv = 0.        | //           |                |              | Z                    | by = 0.        | 38             |                  |
|                   |              |                |                |              | Left s         | ide          |                      |                |                |                  |
| •000<br>•025      | •408         | -851<br>207    | •706           | • 595        | •309           | 314          | •796<br>•038         | 232            | -1.556         | -2:058           |
| •075              | 450<br>151   | 177            | •174<br>-•043  | 030<br>155   | -•449<br>-•449 | •418<br>•275 | •038<br><b>~•003</b> | -•643<br>-•373 | -2 -050<br>526 | -2.060<br>-2.364 |
| .150              | 035          | 167            | 195            | 241          | 447            | 208          | 001                  | 251            | 424            | -490             |
| e 250             | •033         | 131            | 179            | 180          | 312            | •156         | 003                  | 200            | 348            | 529              |
| • 350             | +021         | 089            | 177            | 157          | <b>-</b> •252  | •112         | 024                  | 191            | 317            | 472              |
| • 450             | •003         | 107            | 186            | 159          | 215            | ●082         | 045                  | 170            | 285            | 421              |
| •550              | 016          | 098            | 158            | 125          | 167            | •077         | 024                  | 133            | 250            | 376              |
| •650<br>•750      | 035<br>025   | -•068<br>-•040 | 112<br>075     | 084<br>057   | ~-110          | •070         | 008                  | 094            | 230            | 337              |
| • 850             | 002          | 003            | 027            | -•016        | -•067<br>-•007 | •077<br>•098 | •022<br>•066         | 040            | 187            | 284              |
| 900               | •017         | .017           | .008           | •014         | •032           | •110         | •089                 | •015<br>•057   | 134<br>084     | 238<br>193       |
|                   |              |                |                |              | Right          | side         |                      |                |                | - 1173           |
| • 025             | •264         | -•121          | 371            | •016         | •208           | -,778        | •024                 | •412           | •517           | •574             |
| 075               | 053          | 191            | 371<br>172     | •055         | • 235          | -382         | 017                  | .267           | .4ôi           | 524              |
| • 150             | 186          | 161            | 040            | • 096        | • 251          | 258          | 013                  | •195           | •319           | •441             |
| • 250             | 179          | 117            | •027           | •128         | •201           | 203          | 013                  | +154           | •260           | .366             |
| • 350<br>• 450    | 182<br>186   | 089<br>112     | •027<br>•001   | •105         | •222           | 177          | 029                  | •117           | .210           | • 304            |
| •550              | 154          | 091            | •001           | .068<br>.048 | •217<br>•185   | 165<br>135   | 031<br>031           | •089<br>•068   | •164<br>•132   | •245<br>•194     |
| 650               | 105          | 066            | •001           | •043         | •158           | 095          | 010                  | •068           | •114           | •155             |
| a750              | 060          | 031            | 001            | •057         | .139           | 037          | •024                 | •087           | •109           | •128             |
| <b>850</b>        | 007          | •013           | •017           | •078         | .130           | •028         | •073                 | •112           | .119           | 110              |
| • 900             | •012         | •015           | •020           | •078         | •119           | •054         | .084                 | •114           | .116           | .087             |
|                   |              | Z              | $b_{v} = 0$    | .66          |                |              | Z/b                  | , =0.93        |                |                  |
|                   |              |                |                | -            | Left           | s ide        |                      |                |                |                  |
| •000              | -+335        | •578           | 345            | -1.082       | -1.005         | •180         | .863                 | 359            | 622            | 554              |
| •025              | •473         | .068           | 784            | -1.016       | 980            | <b>821</b>   | •193                 | 717            | 435            | 598              |
| •075              | e357         | •059           | 590            | -1.034       | 984            | ●627         | .158                 | 687            | 414            | 536              |
| ·150              | •280         | •061           | 255            | -1.052       | <b>~</b> •952  | •413         | •112                 | 551            | 421            | 529              |
| <b>♦250</b>       | •240         | •059           | 140            | 629          | 693            | • 285        | •089                 | ~•401          | -·405          | 463              |
| • 350<br>• 450    | •189<br>•131 | •045<br>•015   | 131<br>126     | 102<br>084   | -• 721         |              |                      |                |                |                  |
| •550              | •084         | •003           | -•112<br>-•112 | 118          | 540<br>419     |              |                      |                |                |                  |
| <b>4650</b>       | •068         | •020           | 061            | 100          | 334            | •021         | 008                  | 040            | 184            | 302              |
| ·750              | •068         | •050           | 008            | 071          | 284            | •000         | • 006                | -4008          | 162            | 286              |
| 850               | ●068         | •073           | •038           | 032          | 231            | •012         | .036                 | •031           | ~.134          | - • 296          |
| • 900             | •075         | •089           | •066           | •000         | 202            | <b>∗</b> 024 | •063                 | •052           | 114            | 300              |
|                   |              |                |                |              | Right          | side         |                      |                |                |                  |
| •025<br>•075      | 778          | •075           | 488            | <b>4581</b>  | •613           | 764          | •239                 | 4849           | •961           | 1.009            |
| •150              | 596<br>247   | •052<br>•066   | •357<br>•292   | •492<br>•419 | •602           | -•725        | 154                  | •606           | •770           | •897             |
| • 250             | 130          | •061           | •237           | • 349        | ♦535<br>♦455   | -•485        | •135                 | •433           | •570           | • 704            |
| .350              | 128          | •045           | 181            | 273          | •373           |              |                      |                |                |                  |
| 450               | 114          | •017           | .130           | 207          | •286           |              |                      |                |                |                  |
| • 550             | 093          | .015           | .096           | .150         | •206           |              |                      |                |                |                  |
| •650              | -+053        | •022           | .075           | 105          | •135           | 023          | • 006                | •038           | •055           | +041             |
| • 750             | 011          | •043           | 8 à Q &        | •075         | •071           | 011          | •006                 | •006           | 045            | 094              |
| .850<br>.900      | •061<br>•084 | •093           | •098           | •078         | •029           | •047         | •063                 | •036           | 066            | 174              |
| . 900             | 1 0004       | •117           | •112           | •071         | 005            | •070         | •084                 | •047           | 091            | - • 257          |

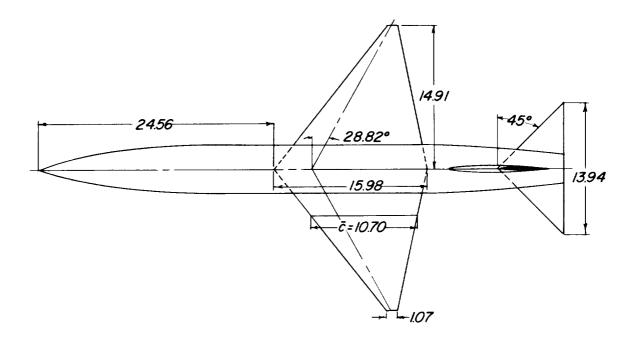
TABLE VIII.- PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Continued

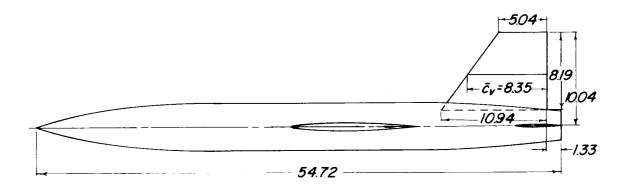
(q)  $\alpha = 15.1^{\circ}$ ; M = 0.80

|                   |                               |                | Cp 1          | for-           |                         | Cp for-      |               |              |                 |                  |  |  |
|-------------------|-------------------------------|----------------|---------------|----------------|-------------------------|--------------|---------------|--------------|-----------------|------------------|--|--|
| ¥                 | B=-3.99                       | B=0°           | B=39°         | B=7.9°         | B=12.70                 | B=-3.9°      | B=0°          | B=3.9°       | B=79°           | B=127°           |  |  |
| $\frac{x}{C_{v}}$ | ·                             | Z              | by = 0.1      | <u> </u>       | <u></u>                 | <u> </u>     | 2/            | by = 0.      | 38              |                  |  |  |
| -V                |                               |                |               | <u> </u>       | Left s                  | ide          |               |              |                 |                  |  |  |
| •000              | •574<br>•592                  | •905<br>••191  | .816<br>.216  | .714<br>.079   | -:248                   | •110<br>•417 | .851<br>.056  | -206         | 774             | -1.499<br>-1.703 |  |  |
|                   | 592                           | -•191<br>-•175 | •216<br>-•005 | •079<br>-•100  | 248<br>337              | •417<br>•283 | •001          | 564<br>362   | -1+505<br>-+677 | -1.819           |  |  |
| •075<br>•150      | 035                           | 164            | 202           | 274            | 475                     | •227         | •003          | 254          | 490             | 580              |  |  |
| 250               | 038                           | 113            | 188           | 217            | 355                     | •174         | •001          | -+204        | 391             | 547              |  |  |
| • 350             | 032                           | 071            | 182           | 186            | 274                     | •129         | 016           | 191          | 343<br>316      | 567<br>482       |  |  |
| •450              | •006                          | 098            | 202           | 192<br>150     | 258<br>203              | •096<br>•088 | 033<br>025    | 182<br>146   | 285             | 421              |  |  |
| •550<br>•650      | 009<br>028                    | 086<br>059     | 167<br>112    | 101            | -•203<br>-•148          | .079         | 008           | 104          | 265             | 375              |  |  |
| 750               | 028                           | 036            | 069           | 072            | 103                     | .085         | •024          | 043          | 223             | 319              |  |  |
| 850               | 003                           | •010           | 019           | 027            | 031                     | •105         | •073          | .019         | 157             | 258              |  |  |
| •900              | •018                          | •033           | .016          | 001            | •016                    | •122         | •097          | •061         | 112             | 209              |  |  |
|                   |                               |                |               |                | Right                   | side         |               |              |                 |                  |  |  |
| •025<br>•075      | •320                          | 075            | 390           | 018            | •178                    | 703          | •015          | •403         | •525<br>•402    | •603<br>•541     |  |  |
|                   | -+014                         | 191            | 173<br>025    | •032<br>•084   | •210<br>•245            | 404<br>278   | 023<br>013    | •267<br>•213 | •328            | •463             |  |  |
| •150<br>•250      | 201<br>197                    | 150<br>095     | -044          | 129            | •222                    | 215          | 005           | •177         | 272             | .397             |  |  |
| •350              | 198                           | 071            | 039           | .112           | •177                    | 195          | 020           | .140         | .229            | • 305            |  |  |
| .450              | 215                           | 100            | .021          | .079           | .189                    | 182          | 037           | •103         | •186            | •279             |  |  |
| •550              | 171                           | 078            | .016          | •061           | •180                    | 151          | 036           | •088         | .150            | •232             |  |  |
| •650              | 113                           | 052            | •010          | •049           | •161                    | 107<br>043   | 016<br>.022   | .088<br>.094 | •132<br>•120    | •193<br>•157     |  |  |
| ●750<br>●850      | 067                           | 026<br>.022    | •015<br>•029  | •059<br>•081   | •145<br>•138            | 026          | •076          | •119         | •121            | 128              |  |  |
| 900               | 017                           | •041           | •030          | •072           | .120                    | .058         | .083          | .122         | •110            | •091             |  |  |
|                   | $z/b_v = 0.66$ $z/b_v = 0.93$ |                |               |                |                         |              |               |              |                 |                  |  |  |
|                   |                               | Left side      |               |                |                         |              |               |              |                 |                  |  |  |
| •000              | 064                           | •624           | ~.065         | 830            | 964                     | •381         | •922          | 034          | 573             | 640              |  |  |
| .025              | •494                          | .094           | 846           | -1.038         | 933                     | ▶858         | •192          | 765          | 573             | 669              |  |  |
| •075              | •376                          | •079           | 703           | -1.053         | 952                     | •642         | •146          | 684          | 524             | 599<br>588       |  |  |
| •150              | •306                          | •079           | 268           | -1.027<br>763  | 909<br>891              | •419<br>•297 | •097<br>•088  | 610<br>489   | 527<br>451      | 537              |  |  |
| • 250             | •270                          | ∙077<br>•054   | 139<br>150    | -•197          | -•071<br>-•7 <b>5</b> 9 | 0271         | •000          | •407         | •421            | •331             |  |  |
| 450               | 148                           | .018           | ~.158         | 117            | 599                     |              |               |              |                 |                  |  |  |
| .550              | •091                          | 004            | 133           | 157            | 493                     |              | _             |              |                 |                  |  |  |
| •650              | •067                          | •006           | 078           | 150            | 426                     | •003         | 031<br>016    | 059<br>022   | 274<br>259      | 381<br>366       |  |  |
| <b>●750</b>       | •059                          | •033           | 022<br>.033   | -•123<br>-•078 | -•371<br>-•304          | 029<br>041   | -•016<br>•024 | •022         | -,243           | 363              |  |  |
| .850<br>.900      | .058<br>.067                  | ∙065<br>•085   | •061          | 055            | -•271                   | 034          | •050          | •042         | 232             | ~.368            |  |  |
| 1,700             |                               |                |               |                |                         | t side       |               |              | <del>-</del>    |                  |  |  |
| .025              | 810                           | •108           | •520          | •612           |                         | 872          | •259          | .882         | 1.019           | 1.086            |  |  |
| ●025<br>●075      | 689                           | •082           | •384          | •516           | •652<br>•632            | - +691       | .158          | •636         |                 |                  |  |  |
| •150              | 305                           | •096           | •323          | 454            | •577                    | 593          | •137          | •448         | •603            | .762             |  |  |
| 250               | 137<br>148                    | .088<br>.054   | •277<br>•210  | ∙388<br>•309   | •513<br>•430            | 1            |               |              |                 |                  |  |  |
| •350<br>•450      | 142                           | •030           | 154           | •235           | 345                     | 1            |               |              |                 |                  |  |  |
| 550               | 124                           | .007           | .108          | .167           | • 256                   |              |               |              |                 |                  |  |  |
| •650              | 078                           | •013           | •077          | •112           | •183                    | 072          | 017           | •021         | •027            | •085             |  |  |
| •750              | 023                           | •038           | •067          | •066           | •103                    | 038          | 008           | 020<br>.004  | 066<br>107      | 042<br>122       |  |  |
| -850              | •053                          | •096<br>•114   | •094<br>•099  | .056<br>.039   | •048<br>•001            | •023<br>•045 | •061<br>•079  | •000         | 188             | 224              |  |  |
| •900              | •081                          | • I I 4        | <b>4</b> 077  | <b>■</b> U37   | 1001                    | 1 3043       |               |              |                 |                  |  |  |

TABLE VIII. - PRESSURE COEFFICIENTS FOR THE COMBINATION OF THE FUSELAGE, VERTICAL TAIL, AND HORIZONTAL TAIL. HORIZONTAL TAIL IN THE FORWARD POSITION;  $i_t=0^\circ$  - Concluded (r)  $\alpha=15.1^\circ$ ; M=0.85

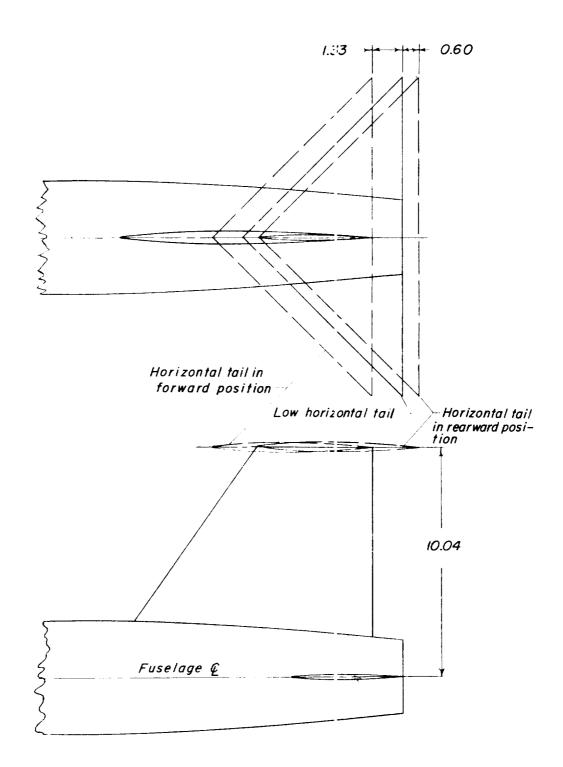
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                  | B=127°         |
|---|------------------|----------------|
| $\frac{Z}{b_{v}} = 0.11$ $\frac{Z}{b_{v}} = 0.11$ $\frac{Z}{b_{v}} = 0.11$ $\frac{Left \ side}{\frac{000}{000} -\frac{637}{000} -\frac{928}{000} -\frac{881}{225} -\frac{175}{112} -\frac{117}{114} -\frac{197}{110} -\frac{888}{043} -\frac{295}{538}$ | 38               | B=12.7°        |
| Left side  •000 -•637 -•928 •851 •756 -•174 •10 •848 -•538  |                  |                |
| •000 -637 -928 •851 •756 -417 •197 •868 -295<br>•025 -650 -200 •225 •123 -174 •410 •043 -538  | -1.370<br>-1.351 |                |
| 1 1074  | -1.370<br>-1.351 |                |
| 1 1074 1075 1075  | -14321           | -1:255         |
|   | -4706            | -1.627         |
| •150   -•035 -•179 -•208 -•280 -•450   •227 -•014 -•271   | 541              | 741            |
| •250 •033 -•129 -•199 -•249 -•402   •177 -•013 -•215  | 427              | 422            |
| +350  | 390              | 644            |
| 100   | 358              | 503            |
| 1450  | 327              | 467            |
| *****   -*****   ********************   | 304              | 417            |
| •850 -•007 -•003 -•028 -•043 -•059 •102 •054 •010   | -•251<br>-•179   | 355<br>285     |
| •900 •013 •020 •010 -•012 -•008 •115 •079 •054  | -+122            | 231            |
| Right side  | *122             |                |
| •025 •343 -•083 -•430 -•043 •165 -•694 •000 •394  | +518             | •611           |
| •075   •005 -•216 -•178 •021 •190   -•413 -•044 •265  | 405              | .541           |
| •150  | •331             | •467           |
| 1980  | •283             | • 4.04         |
| 1   | •207             | •280           |
| 0550  | •197             | •290           |
| •650 -•119 -•070 •010 •053 •157 -•118 -•032 •087  | •162<br>•143     | • 243<br>• 202 |
| ■ 0750075040 .014 .058 .142054 .004 .096  | 128              | • 165          |
| •850   ~•012 •010 •025 •078 •133   •020 •064 •116   | •125             | •132           |
| •900 •013 •029 •033 •075 •117 •053 •066 •121  | •109             | •092           |
| $z/b_v = 0.66$ $z/b_v = 0.93$   |                  |                |
| Left side   |                  |                |
| .000012 .634 .005716901 .440 .936 .081  | 606              | 716            |
| •025 •503 •086 -•866 -1•105 -•884 •869 •194 -•750   | 714              | 701            |
| e075 e384 e074 -e748 -1e113 -e912 e654 e124 -e707   | 672              | 646            |
| 1   | 682              | 644            |
| 1   | 626              | ~•606          |
| •350  |                  |                |
| •550 •090 -•023 -•158 -•211 -•552   |                  |                |
| .650 .066017098192487  002084081  | 321              | 450            |
| •750 •052 •010 -•039 -•150 -•426 -•041 -•047 -•050  | -•291            | 427            |
| •850   •048 •043 •020   -•095   -•352   -•064   -•006   -•002   | 271              | 415            |
| •900 •059 •060 •051 -•068 -•318 -•068 •023 •021   | 266              | 412            |
| Right side  |                  |                |
| •025  | 1.041            | 1.109          |
| 150   | .834             | •978           |
| *150   -*320 *089 *332 *464 *587   -*621 *123 *452   *250   -*145 *080 *288 *400 *523   | •623             | •779           |
| ■ 350   |                  | Í              |
| •450 -•166 •009 •162 •251 •360  |                  |                |
| •550   -•138   -•014   •110   •179   •272   |                  | ]              |
| •650   -•095   -•010   •077   •125   •199   -•091   -•050   •017  | •052             | .103           |
| •750   -•037   •014   •063   •078   •119   -•061   -•040   -•033  | 049              | 017            |
| •850 •046 •077 •091 •062 •059 -•001 •031 -•016  | 086              | 087            |
| •900 •073 •094 •091 •041 -•001 •025 •049 -•029  | 169              | 185            |





(a) Complete model with horizontal tail in low position.

Figure 1.- Details of test model. (All linear dimensions are in inches.)



(b) Horizontal-tail positions.

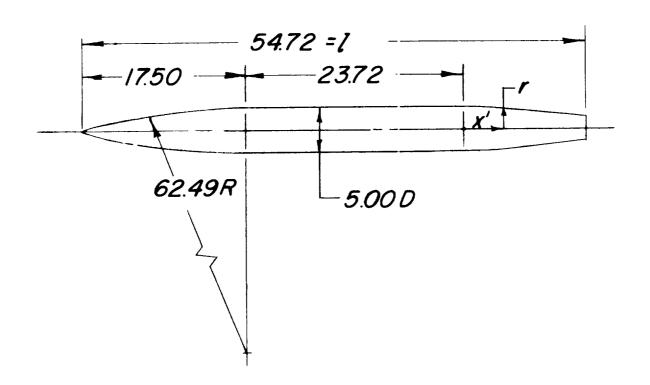
Figure 1.- Continued.

| 2/9     | 0.11 | 0.38 | 99.0 | 0.93 |
|---------|------|------|------|------|
| Station | /    | 2    | 3    | 4    |

| 57   | h<br>          | ~^<br>               | <b>~</b> | V    | <u>\</u> | <b>∕</b> ∿ | Λ    | )    |      |     |      |      |      |     |
|--|----------------|----------------------|----------|------|----------|------------|------|------|------|-----|------|------|------|-----|
| Chordwise location of static orifices, x <sub>6v</sub> | Station 4      | Left side Right side | 000      | .025 | 075      | 150        |      |      |      |     | .650 | .750 | .850 | 900 |
|  |                | Left side            | 000      | .025 | .075     | .150       | .250 |      |      |     | .650 | .750 | .850 | 900 |
| Chordwise location                                     | Stations 1,2,3 | Left and right sides | 000      | .025 | .075     | ./50       | .250 | .350 | .450 | 550 | .650 | 750  | .850 | 006 |

(c) Vertical-tail pressure-orifice locations.

Figure 1.- Continued.

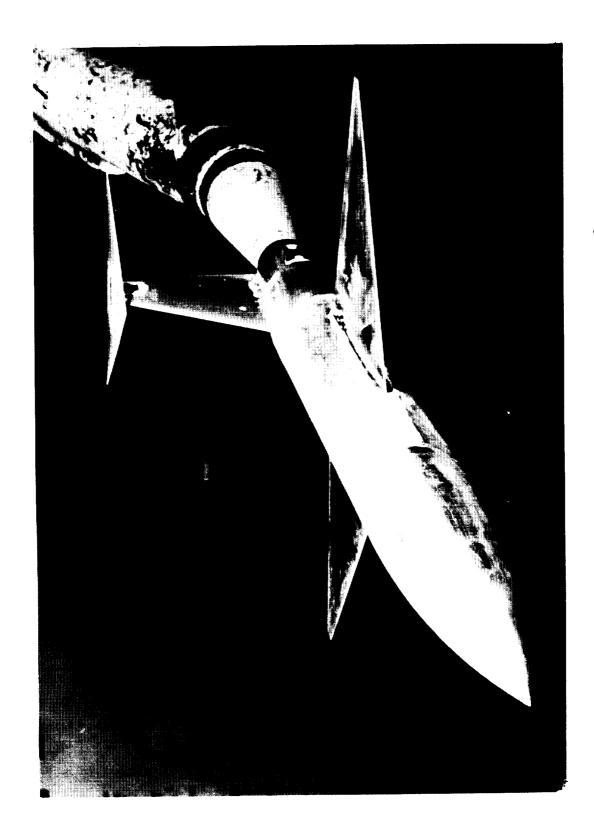


## Afterbody Coordinates

| x' <sub>Z</sub> | 1/2     |
|-----------------|---------|
| 0               | .0456   |
| .0320           | .0445   |
| .0639           | .0427   |
| .1187           | .0390   |
| Straigh         | ht-line |
| tape            | er      |
| .2460           | .0301   |

(d) Fuselage dimensions; fineness ratio, 10.94.

Figure 1.- Concluded.



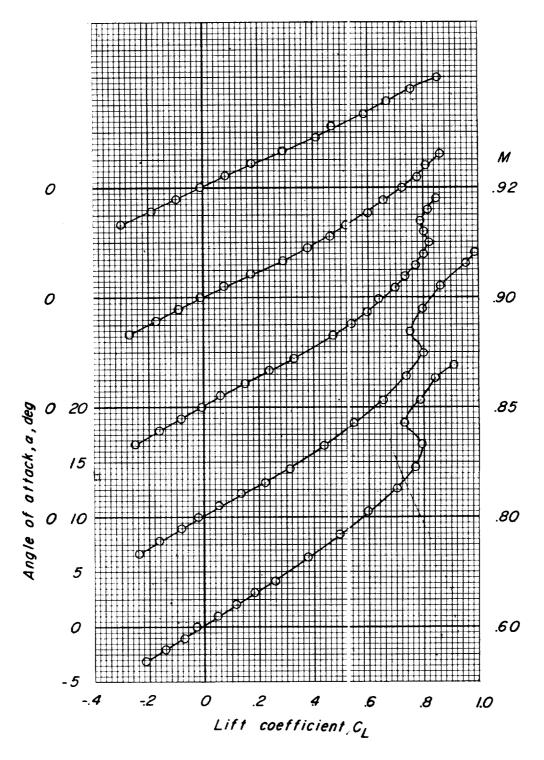


Figure 3.- Variation of model lift coeffici€nt with angle of attack.

Horizontal tail off. (Data from ref. 10.)

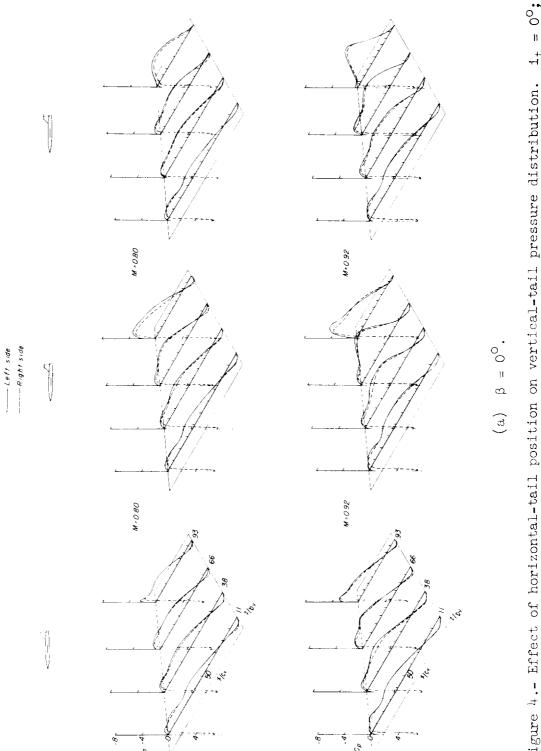
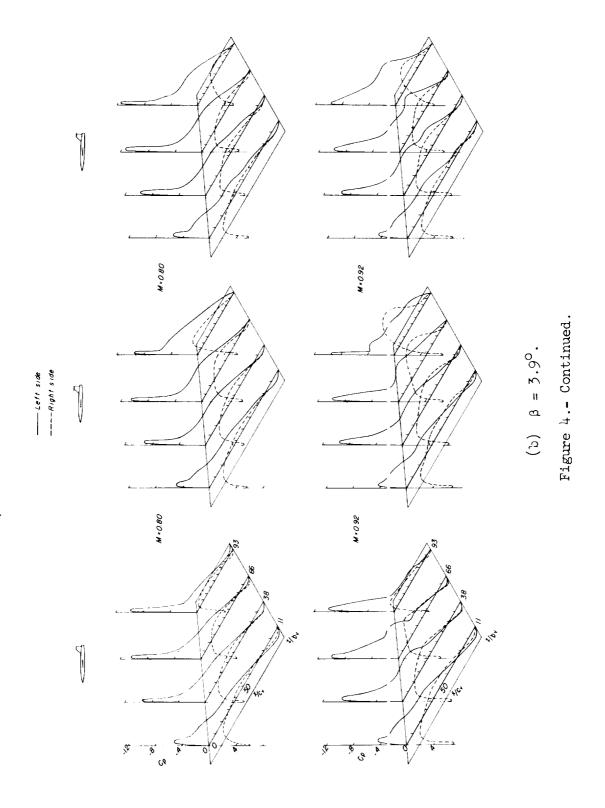
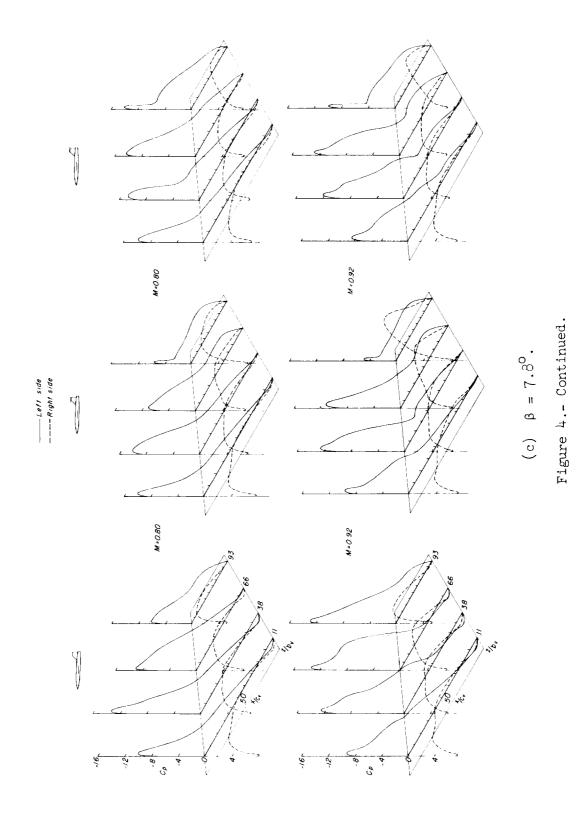


Figure h.- Effect of horizontal-tail position on vertical-tail pressure distribution.  $t_{\rm t}=0^{\rm o}$ ;





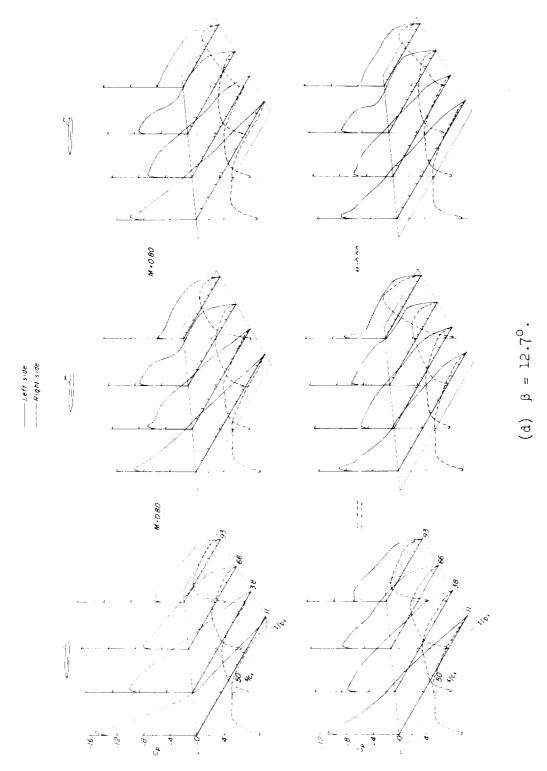


Figure 4.- Concluded.

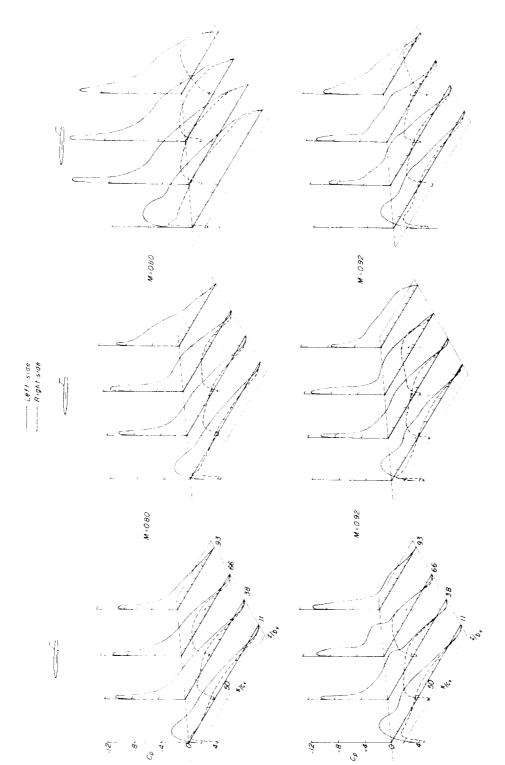


Figure 5.- Effect of horizontal-tail position on vertical-tail pressure distribution.  $i_t = 0^0$ ,

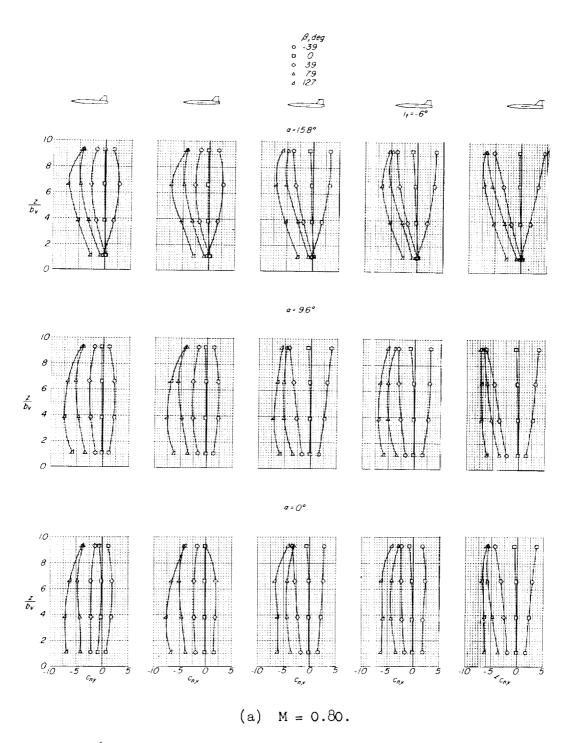


Figure 6.- Effect of sideslip angle on the spanwise variation of vertical-tail section normal-force coefficient.  $i_t = 0^0$  (except where noted).

(b) M = 0.92.
Figure 6.- Concluded.

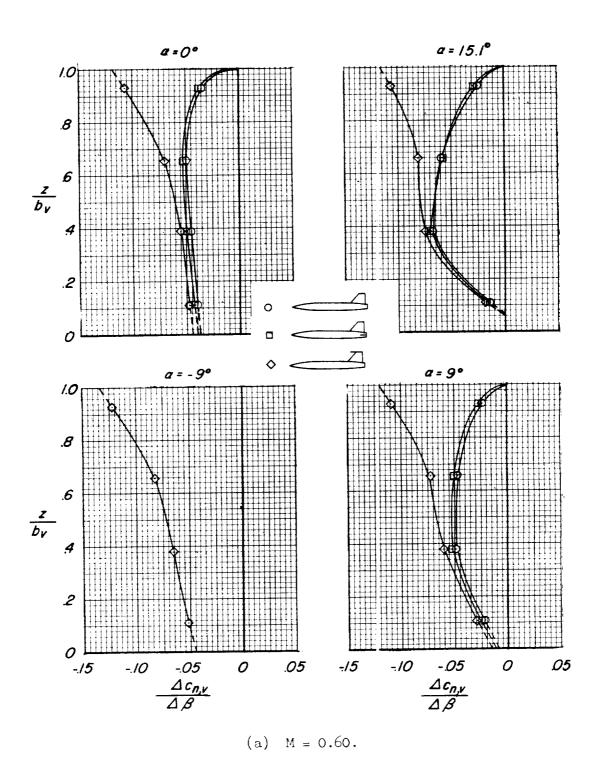
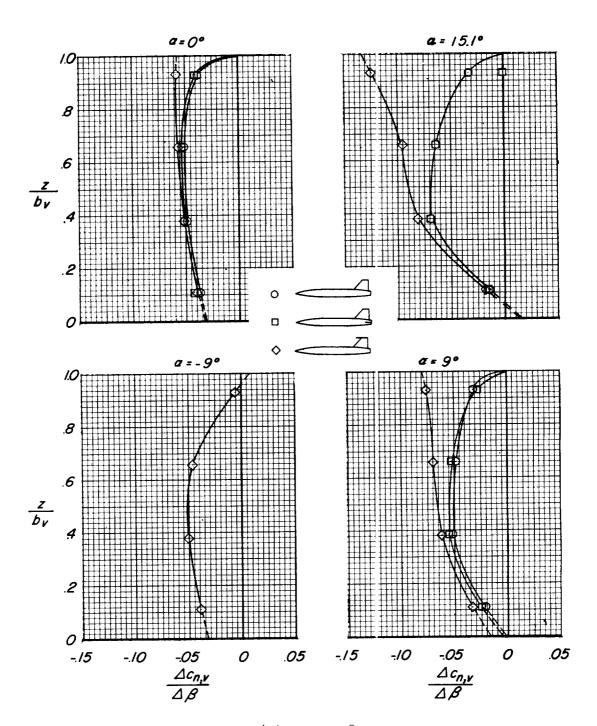


Figure 7.- Effect of horizontal-tail position on the spanwise variation of vertical-tail section normal-force coefficient per degree of sideslip. Wing-off configuration;  $\Delta\beta \approx 3^{\circ}$ ;  $i_{t}=0^{\circ}$ .

a = 0° a = 15.1° 8 .6  $\frac{z}{b_V}$ 2 a = -9° a = 9° 1.0 .**8** .6  $\frac{z}{b_V}$ 2 0 -.05 Δc<sub>n,v</sub> -.05 Δc<sub>n,v</sub> Δβ -./**5** -.10 0 .05 -15 -10 .05 0

(b) M = 0.80.

Figure 7.- Continued.



(c) M = 0.85.

Figure 7.- Continued.

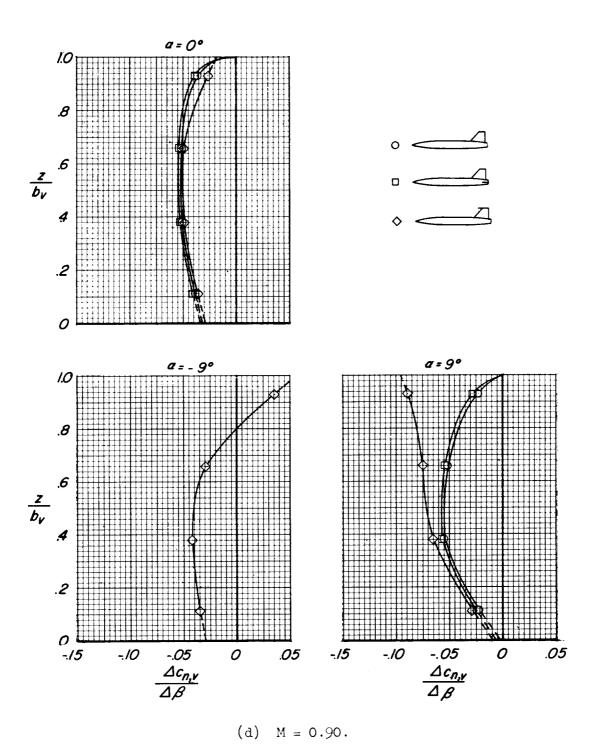


Figure 7.- Continued.

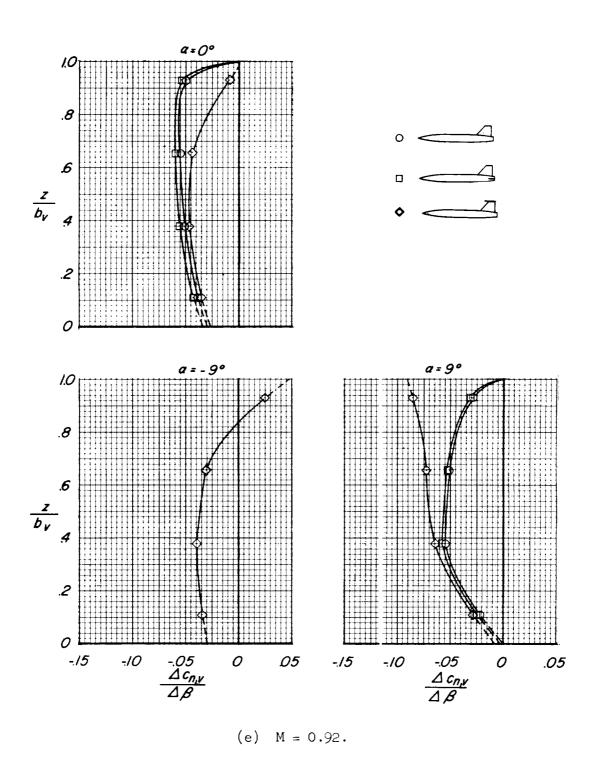


Figure 7.- Concluded.

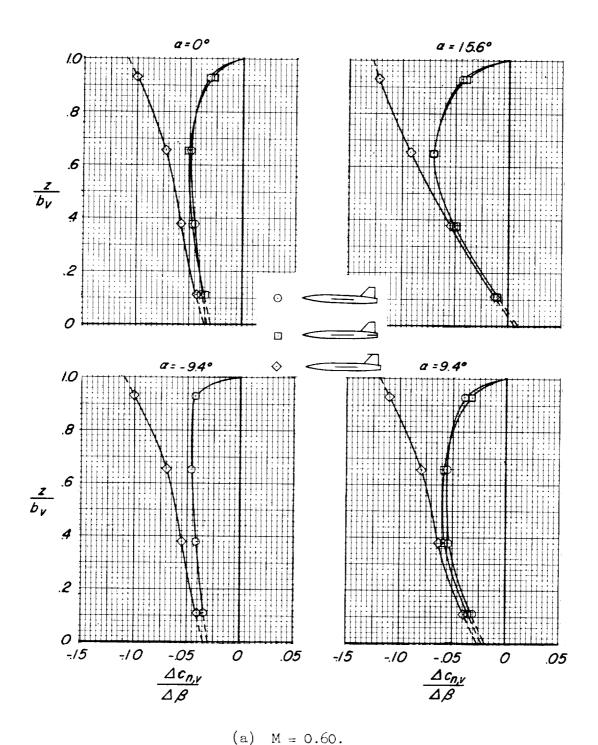


Figure 8.- Effect of horizontal-tail position on the spanwise variation of vertical-tail section normal-force coefficient per degree of sideslip.  $\Delta\!\beta \approx 8^{\rm O}$ ;  $i_t$  =  $0^{\rm O}$ .

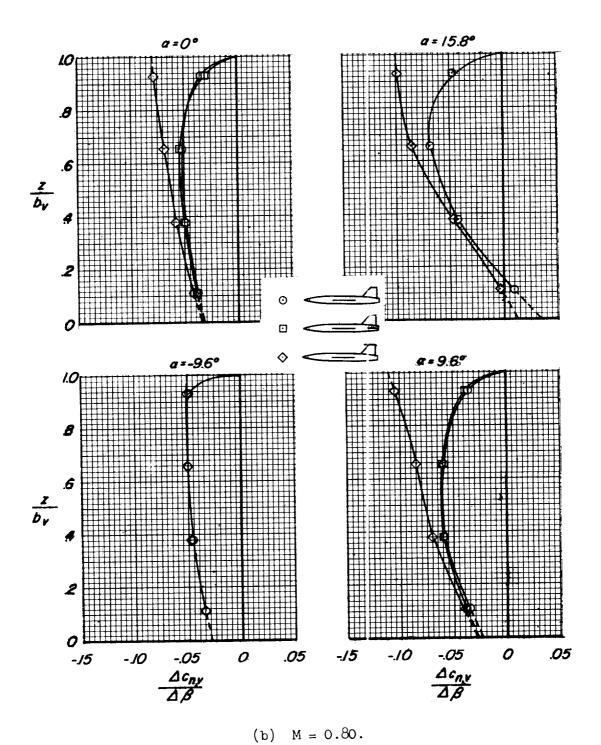
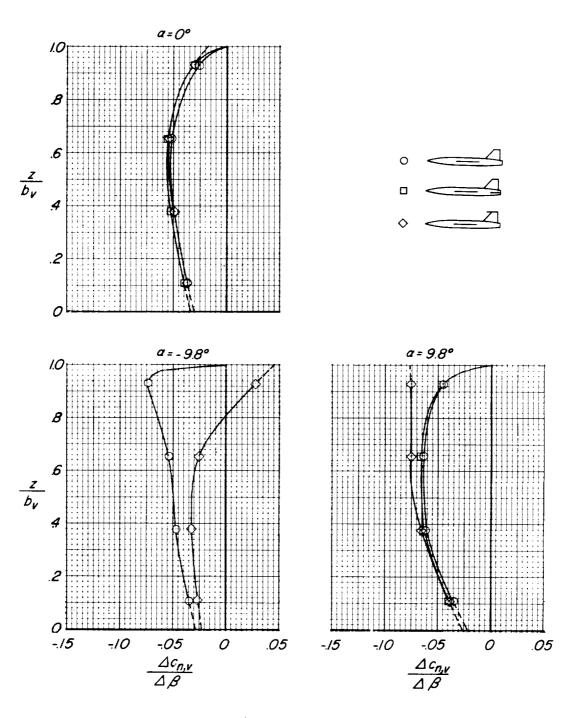


Figure 8.- Continued.

a = 15.9° a = 0° 1.0 .8 .6 .4 .2 a = 9.70 a = - 9.7° 1.0 .**8** .6  $\frac{z}{b_{v}}$ .2 o ⊞ -/5 -05 Δc<sub>n,v</sub> Δβ -05 Δ c<sub>n,y</sub> Δβ -.10 .05 -.10 0 -./5 .05 0

(c) M = 0.85.

Figure 8.- Continued.



(d) M = 0.90.

Figure 8.- Continued.

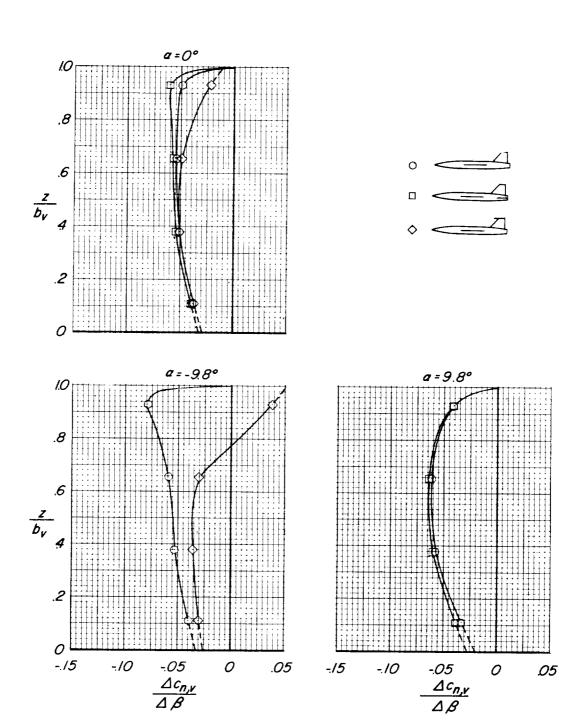


Figure 8.- Concluded.

(e) M = 0.92.

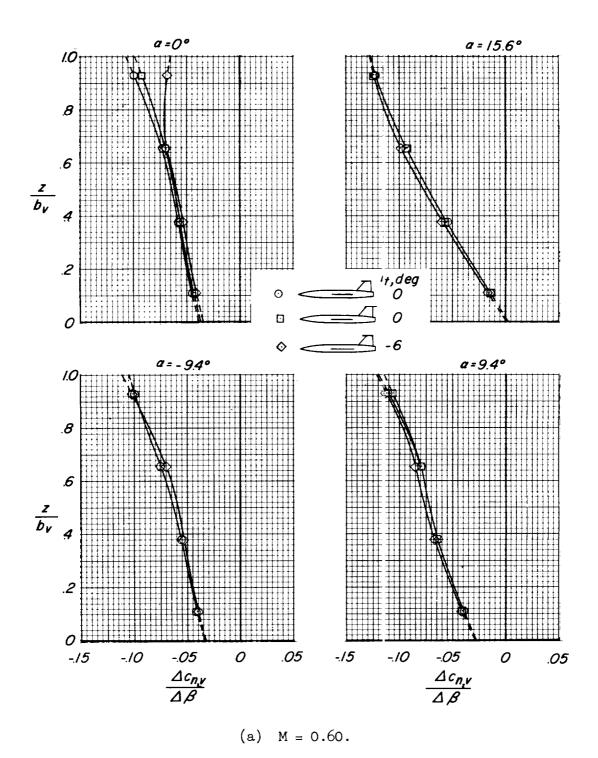
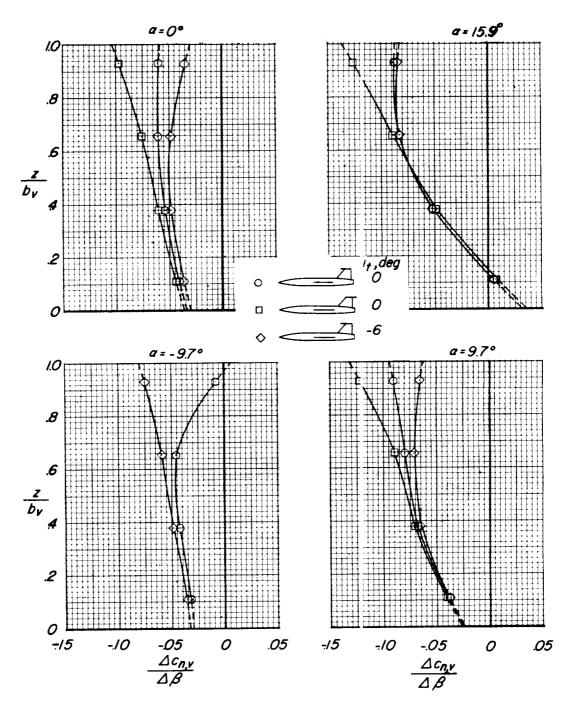


Figure 9.- Effect of horizontal-tail position and incidence on the spanwise variation of vertical-tail section normal-force coefficient per degree of sideslip.  $\Delta\!\beta\,\approx\,8^{\text{O}}$ .

a = 15.8° 1.0 .8 .6  $\frac{z}{b_{V}}$ 2 i<sub>t</sub>,deg O a = -9.6° .**8** .6  $\frac{z}{b_{V}}$ .2 0 -05 △c<sub>n,v</sub> △β -05 Δc<sub>n,v</sub> Δβ 0 -./**5** .05 -./5 -10 0 .05 -.10

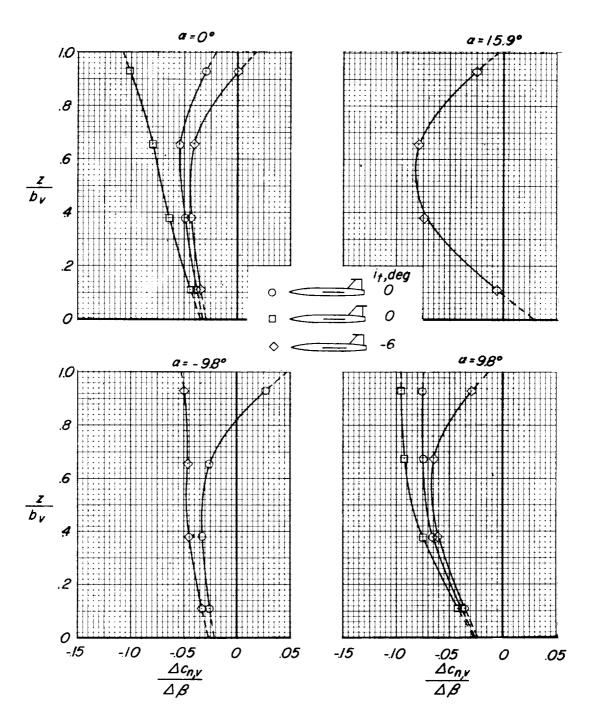
(b) M = 0.80.

Figure 9.- Continued.



(c) M = 0.85.

Figure 9.- Continued.



(d) M = 0.90.

Figure 9.- Continued.

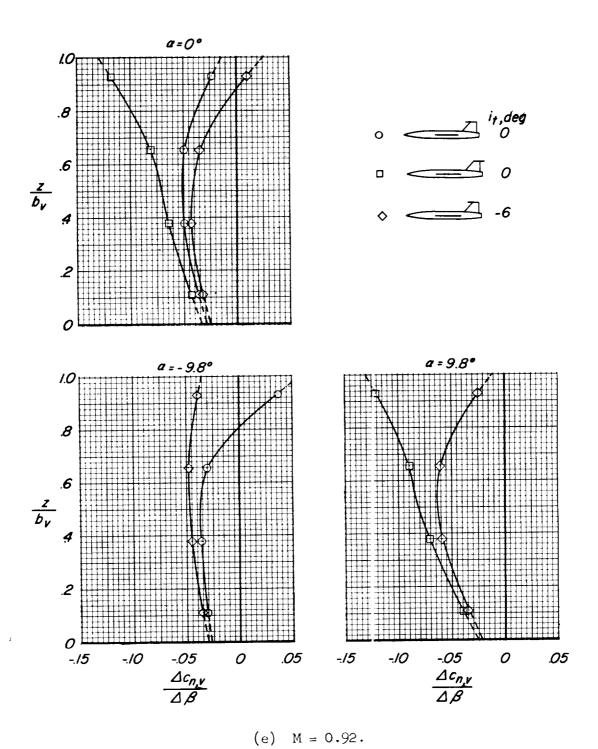


Figure 9.- Concluded.

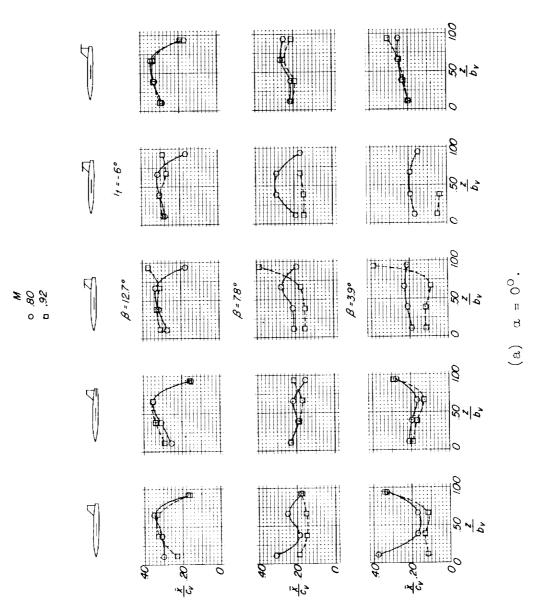


Figure 10.- Effect of horizontal-tail position and incidence on the chordwise location of vertical-tail local centers of pressure.  $i_t=0^{\circ}$  (except where noted).

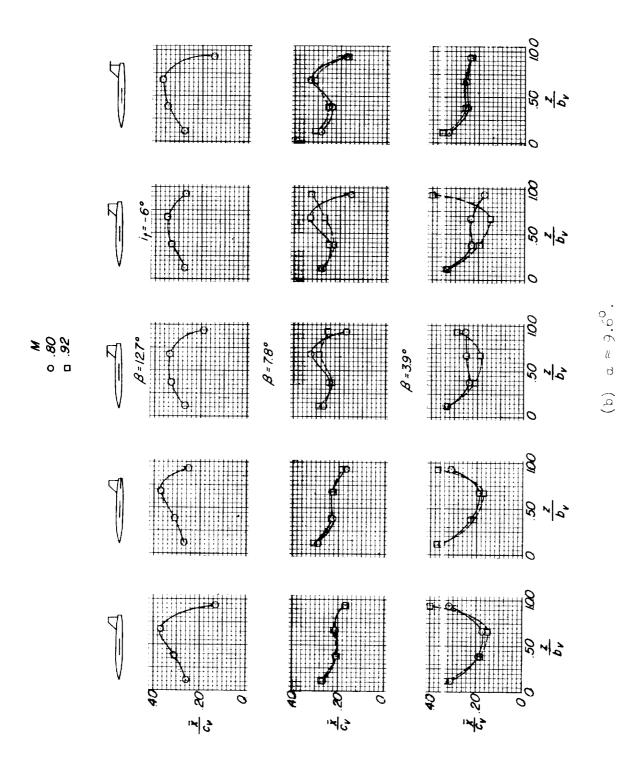


Figure 10.- Continued.

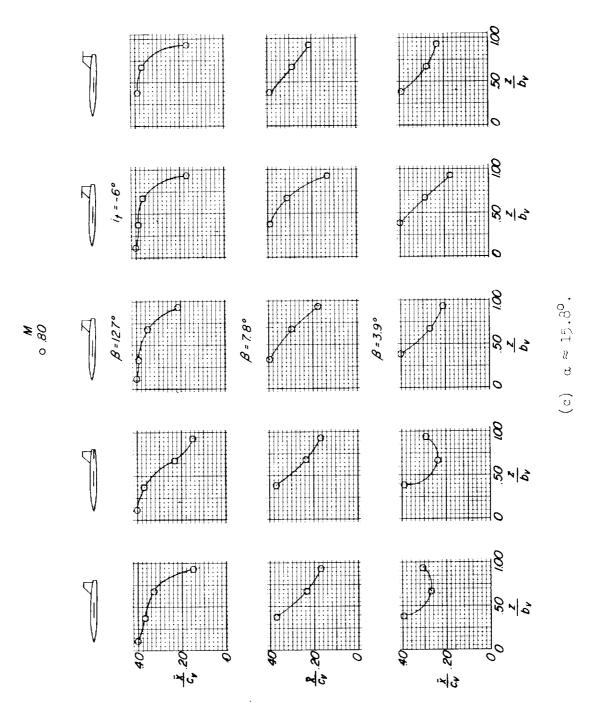
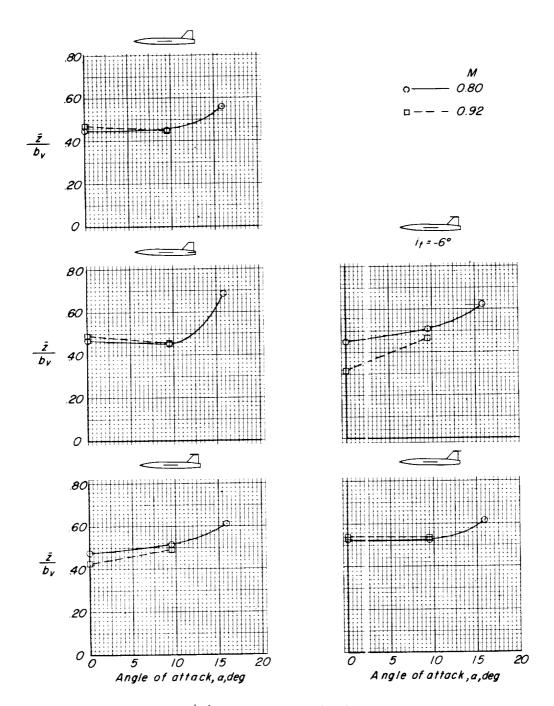
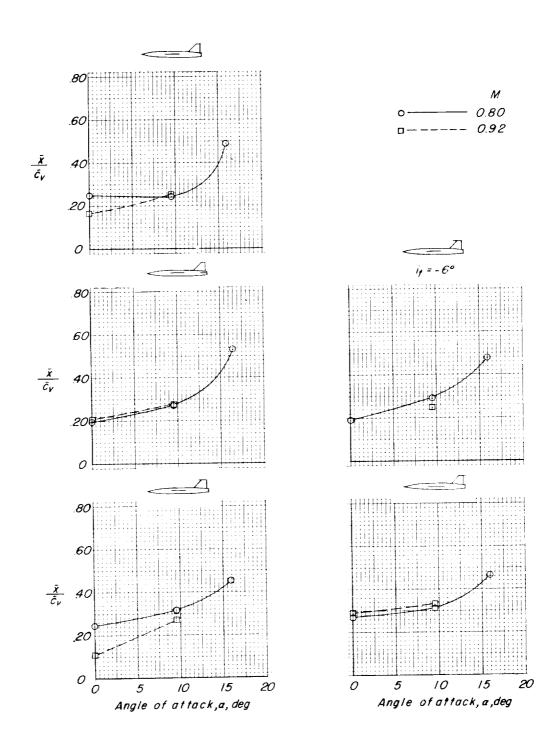


Figure 10.- Concluded.



(a) Spanwise variation.

Figure 11.- Effect of horizontal-tail position and incidence on the variation of the center of pressure cf the total vertical-tail load with angle of attack.  $\Delta\!\beta \approx 8^{\rm O}$ .



(b) Chordwise variation.

Figure 11.- Concluded.

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